FREIGHT TRAFFIC ISSUE

American Railway Progress Exposition: Shipper events on tap at Chicago . . . . p. 58

May 27, 1963

RAILWAY AGE WEEKLY

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Industrial traffic men want more experimental rates p. 14

New cars for fragile freight p. 18

How FEC keeps trains running despite strike p. 54

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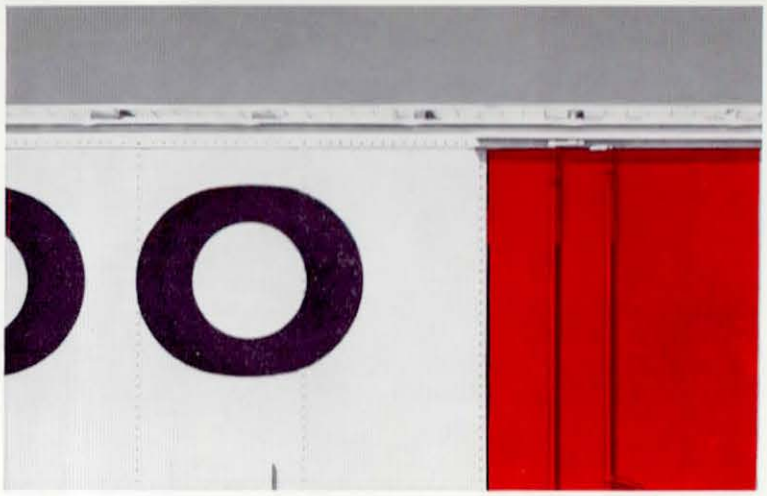
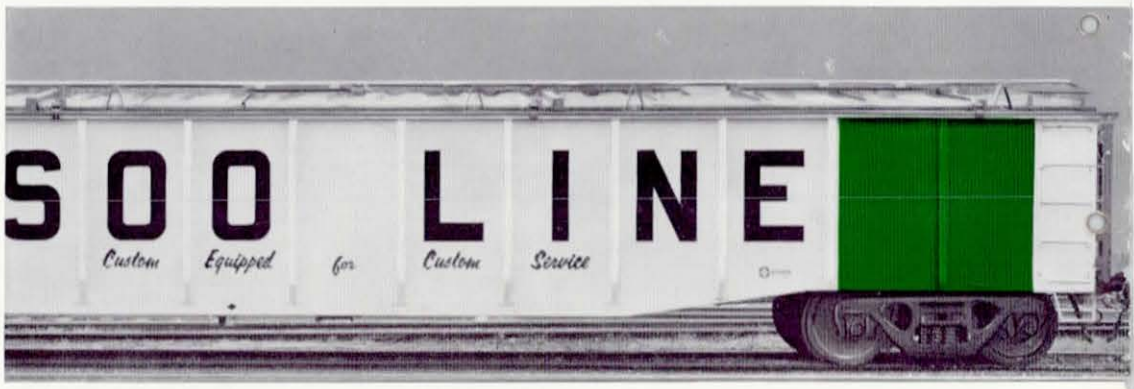
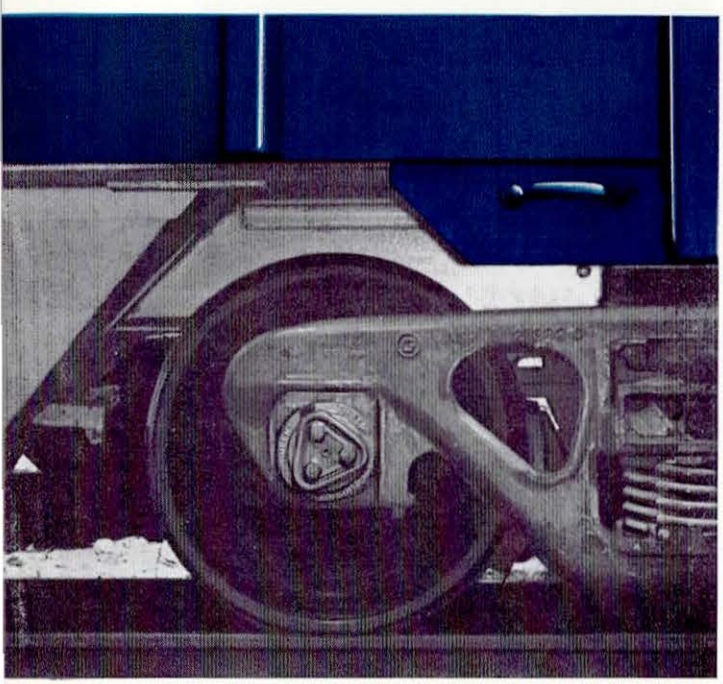
) cents: A Simmons-Boardman TIME-SAVER Publication



The new Soo . . .



is bright and smart . . .



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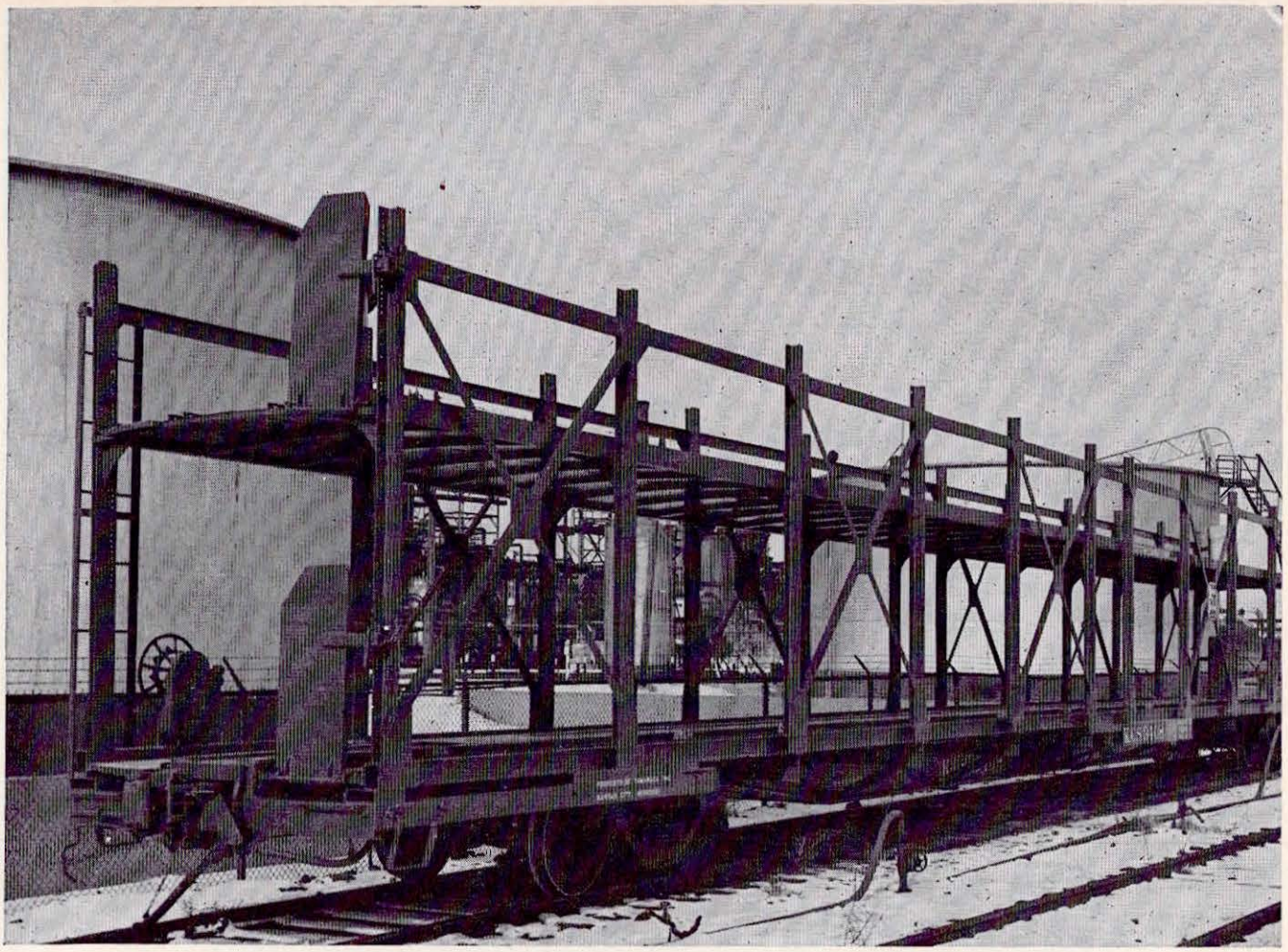

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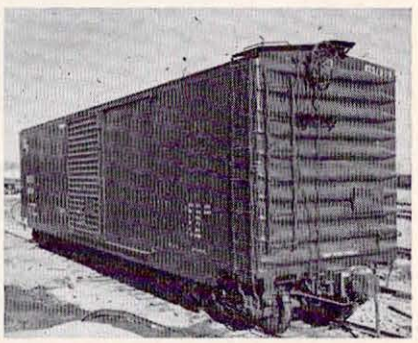

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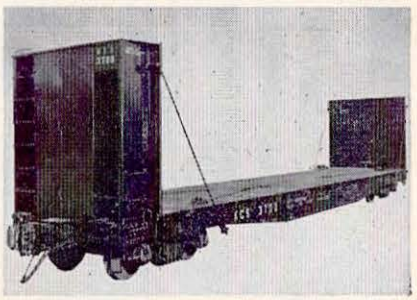
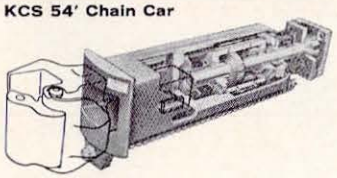


KCS 54′ Chain Car



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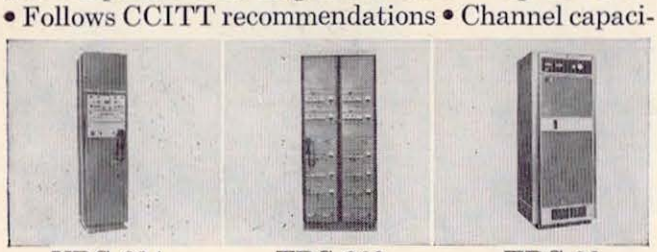

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RAILWAY AGE WEEK AT A GLANCE

May 27, 1963 • Vol. 154, No. 20

ICC gets program on grade accidents

A three-fold program to reduce hazards at rail-highway intersections at grade, where 1,300 persons are killed annually, has been recommended by an ICC examiner **p.9**

Bootleg trucking: Starve it to death

A quick, simple and cheap way to fight the still-growing problem of illegal truckers is to stop using their services, says the traffic manager of Sunkist Growers.....**p.13**

Shippers want more experimental rates

Almost unanimous support for legislation to encourage more rate-making experiments was expressed by respondents to this month's traffic poll.....**p.14**

New cars for fragile freight

The Southern's steadily expanding fleet of box cars with long-travel cushion-underframes is saving the road's patrons thousands of dollars in shipping costs.....**p.18**

Real estate deals raise RR revenue

The various ways railroads produce income from their considerable land holdings were outlined at the recent Chicago meeting of the American Railway Development Assoc. **p.33**

Non-op strike fails to stop FEC trains

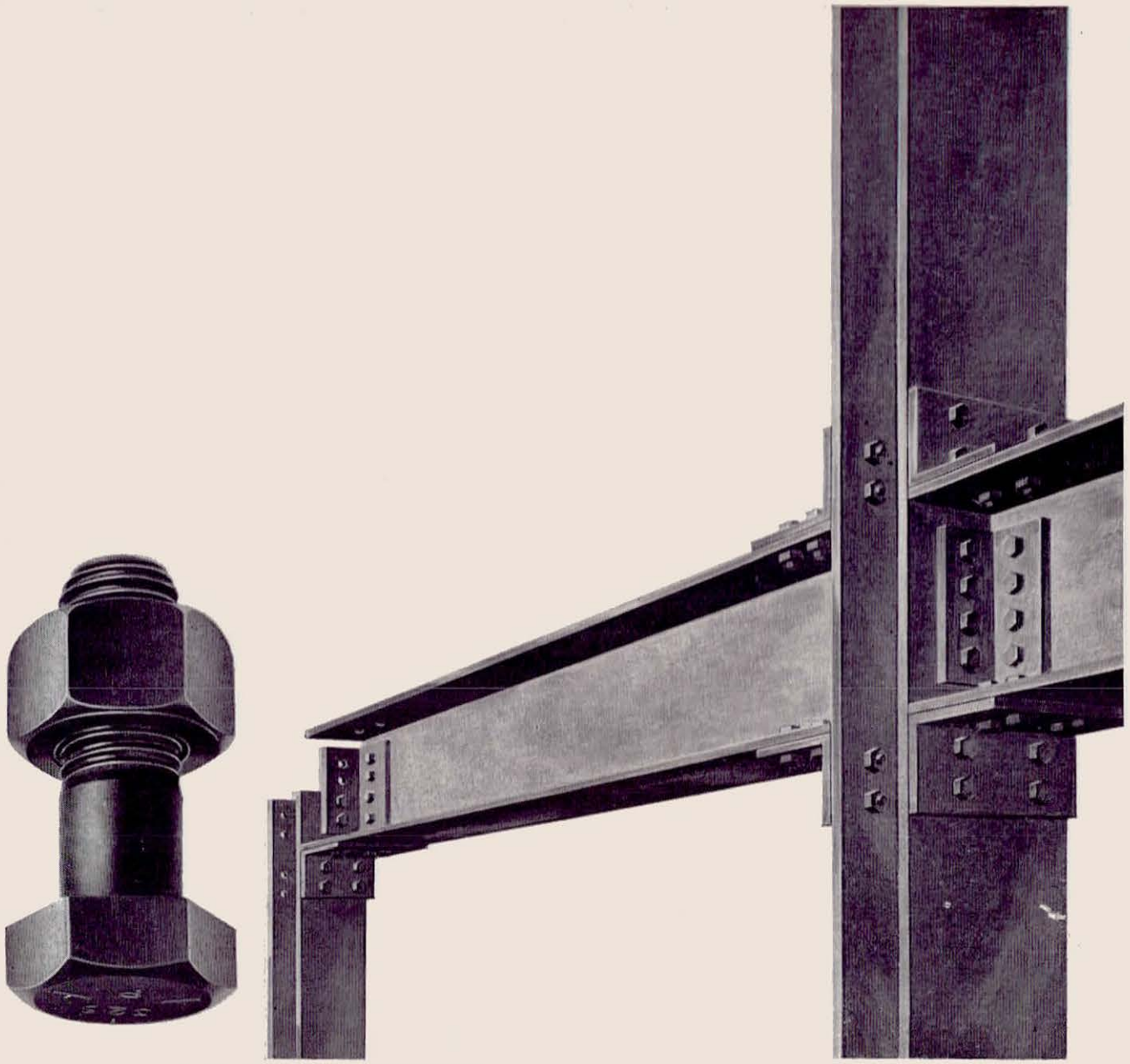
Supervisory personnel are keeping the Florida East Coast running despite a four-month strike of non-operating employees and the refusal of ops to cross picket lines.....**p.54**

Shipper events on tap at Chicago Exposition

The annual meeting of the National Association of Shippers Advisory Boards will be held next October during the American Railway Progress Exposition.....**p.58**

Frisco develops rail-cropping units

Equipment made in the road's shops for cropping rail ends in track includes a track-mounted sawing unit and a winch for pulling the cropped rails together.....**p.74**



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RAILWAY AGE WEEK AT A GLANCE

Hot cargo gets a safe ride to burial

A three-year accumulation of radioactive waste collected at Brookhaven National Laboratory was hauled 800 miles by rail last week through heavily-populated areas.....**p.78**

Twin industry needs: 'Unity-self help'

Although the regulatory-legislative climate for railroads is improving, the industry still has a pressing need for greater unity and initiative toward self-help **p.80**

The Action Page—Shipper statesmanship

Shippers who approach transport problems from the standpoint of national interest are the people who will provide leadership in formulating effective transport policy.....**p.84**

Short and Significant

The 1,400 Hydra-Cushion cars . . .

ordered by Southern Pacific (page 77) will bring its ownership of such equipment to 5,736, "by far the largest fleet in the nation," says W.G. Peoples, vice president traffic.

Class I railroad employment . . .

dipped to 674,423 in mid-April—1.13% below the March figure and 4.38% below the year-ago average, according to the ICC's Bureau of Transport Economics and Statistics.

San Francisco's transit bond issue . . .

has been declared legal by a California court. Although an appeal is pending, a final enginering-design study—delayed six months by a taxpayer's suit—is set to begin July 1.

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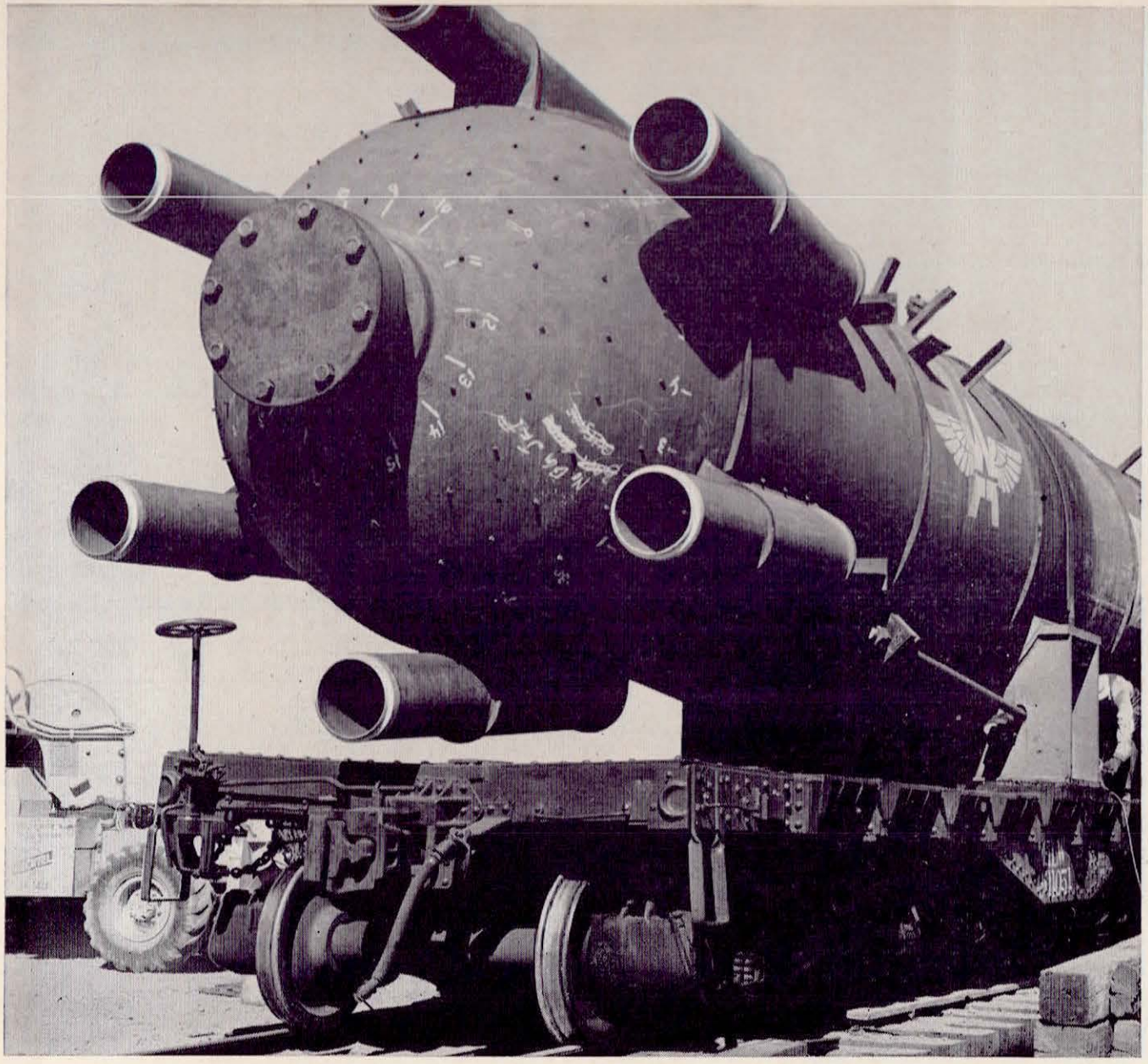
Current Statistics

Operating revenues		**Carloadings revenue freight**	
3 mos., 1963	$2,238,049,679	20 wks., 1963	10,631,590
3 mos., 1962	2,286,932,404	20 wks., 1962	10,910,266
Operating expenses		**Freight cars on order**	
3 mos., 1963	1,798,030,564	May 1, 1963	19,872
3 mos., 1962	1,823,291,544	May 1, 1962	14,244
Taxes		**Freight cars delivered**	
3 mos., 1963	214,320,105	4 mos., 1963	13,300
3 mos., 1962	253,124,089	4 mos., 1962	12,315
Net railway operating income		**Serviceable cars**	
3 mos., 1963	125,807,318	April 1, 1963	1,414,166
3 mos., 1962	116,556,316	April 1, 1962	1,461,833
Net income, estimated		**Cars awaiting repairs**	
3 mos., 1963	83,000,000	April 1, 1963	128,690
3 mos., 1962	71,000,000	April 1, 1962	136,151



S.P. highballs a million-pound shipment!

This 98-foot oil refinery vessel, used in making premium gasoline, is one of the heaviest articles of freight ever shipped on a U.S. railroad. Total weight for the shipment, including special cradles and flat cars: 1,079,200 pounds!

Six of these huge pressure vessels were delivered via S.P. to an expanding West Coast refinery. To meet precise installation schedules, on-time performance was a must. In spite of the enormous weight and special handling requirements, S.P. put each vessel on the construction site at exactly the time it was needed.

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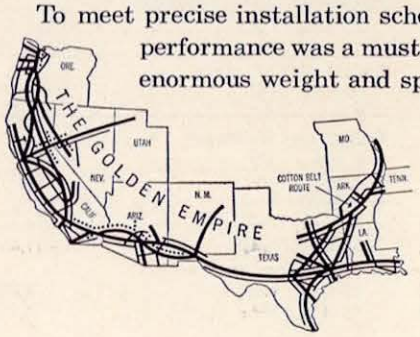

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ICC Gets Program On Grade Accidents

Reporting on ICC investigation of the problem, Examiner H. J. Vinskey recommends three-fold program to cut hazards at rail-highway intersections, where 1,300 persons are killed annually.

Stricter enforcement of existing rules, promulgation of new regulations for unregulated motor carriers and closer cooperation among agencies concerned with highway and railroad safety is the program recommended by Examiner Henry J. Vinskey in his proposed report on the ICC's study of ways and means of preventing accidents at rail-highway grade crossings. Though instituted by the Commission's own motion, the study (docketed as No. 33440) came in the aftermath of petitions filed by the five unions representing railroad operating employees.

Those unions are the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen & Enginemen, Order of Railway Conductors & Brakemen, and Switchmen's Union of North America. Their petition, filed May 11, 1960, sought a Commission inquiry into crossing accidents involving trains and motor vehicles carrying petroleum products and similar dangerous inflammable liquids. The Commission denied the motion on Aug. 15, 1960, but instituted a like inquiry on its own motion six months later—on Feb. 6, 1961. On Sept. 13, 1961, the Commission broadened that inquiry to include all grade-crossing accidents between trains and motor vehicles, and that's the investigation out of which Examiner Vinskey's report has come.

The examiner found that the principal cause of grade-crossing accidents is the failure of drivers to stop or exercise due care and caution, or to observe and comply with safety laws and regulations. The report describes federal, state and local enforcement of laws governing operation of motor vehicles at grade crossings as "woefully weak" and cites a "definite need" for prompt action to enforce existing safety laws and regulations. Examiner Vinskey's specific recommendations call for:

- Creation of an organization, either by Congress or by Presidential order, to formulate uniform standards and make recommendations concerning necessary protective measures required at rail-highway grade crossings.
- Consideration by Congress of legislation to provide public funds for installation and maintenance of grade-crossing warning devices.
- Amendment by state legislatures of existing laws and regulations for operators of motor vehicles transporting dangerous commodities. Also, requirement by states that vehicles carrying dangerous cargoes be routed over grade crossings outside of congested areas where hazards to the public are at a minimum.
- Careful screening by state and local authorities in selecting school bus drivers, including investigation of their character, competence and responsibility.
- Prompt action by railroads to improve maintenance of railroad rights of way at grade crossings to provide safer passage for motor vehicles and removal of all sight obstructions.
- Establishment by railroads of adequate, uniform warning time of at least 20 seconds to signal the approach of trains to drivers approaching crossings.
- An intensified and cooperative effort by state and local authorities to immediately enforce all laws and regulations in effect at grade crossings, with particular attention to rules applicable to vehicles transporting flammable and other dangerous commodities.
- Requirement by ICC that vehicles of private carriers transporting explosives and other dangerous commodities be registered and marked with an identifying placard.
- Revision by ICC of rail-highway grade crossing accident reports to provide a more detailed and informative description of the cause of each accident.
- Consideration by Congress of an increase in the Commission's personnel to meet the expanded policing requirements resulting from these recommendations.

As to who should pay for grade-crossing protection, Examiner Vinskey reported that evidence in the case supported a conclusion that costs should be borne by the public, the "principal recipient of the benefits." The proposed report went on to emphasize how the grade-crossing situation has changed since the early days of railroading.

"In the past," it said, "it was the railroad's responsibility for protection of the public at grade crossings. Now it is the highway, not the railroad, and the motor vehicle, not the train, which creates the hazard and must be primarily responsible for its removal."

- **Proposals rejected.** Meanwhile, the examiner had considered and rejected various proposals which would have

THE GRADE-CROSSING ACCIDENT—when someone didn't stop, look and listen.

TAFT

● **The 85-YEAR-OLD DIFFERENTIALS** favoring the so-called Southern tier Atlantic ports of Philadelphia, Baltimore and Hampton Roads are on the way out. Their death sentence came in a ruling announced last week by the United States Supreme Court. The ruling affirmed a lower-court decision which condemns an ICC order upholding the differentials. The result is freedom for railroads serving the Northern tier ports of New York, Albany, Boston and Portland to adjust their rates on the traffic at stake to a parity basis with rates to and from the Southern tier ports. The traffic at stake is export and import traffic, except iron ore, coal and coke, moving through the ports from or to so-called differential territory. Generally, that's Central Freight Association and Illinois Freight Association territories and Southern Wisconsin.

THE DIFFERENTIALS, ranging from two to eight cents per 100 lb., have been in effect since 1877—except for brief periods of disagreements between the carriers during the 1880's. They have been assailed many times by port interests, but the present case, docketed at the ICC as I&S No. 6615, is the first in which railroads sought to eliminate them.

RAILROADS serving the Northern tier ports started the movement more than seven years ago, filing tariffs to eliminate the differentials. Railroads serving the differential ports countered with tariffs proposing to cut their rates by amounts necessary to maintain the differentials. These tariffs never became effective, having been suspended first by the Commission and then by voluntary action of the carriers.

COMMISSION DECISIONS calling for maintenance of the differentials were issued in 1961, and were soon taken to court by railroads serving the Northern tier ports. The main prop of their case was the equalization of ocean shipping rates to and from all the competing ports. That has come about since the differentials were established for the purpose of "effecting equalization of rail-ocean transportation costs," as the lower court put it.

THE LOWER COURT was a special three-judge court sitting in the United States District Court for the District of Massachusetts. Its opinion of February 16, 1962, concluded that the Commission's decision "is erroneous in law and lacks the rational basis necessary to uphold it."

TO REACH THAT CONCLUSION, the court rejected Commission findings that parity rates would result in Section 3(1) violations because of the distance disadvantage of the Northern tier ports, and that equalization would not materially affect the flow of traffic to those ports. The court also said that the Commission failed to distinguish between rates which carriers may voluntarily publish to meet competition and rates which carriers, on complaint, may be required to change.

THE U.S. SUPREME COURT'S RULING was embodied in a brief announcement which said the lower-court judgment "is affirmed by an equally-divided court." It was a 4-to-4 vote, as the announcement also said that Justice White took no part. He was in the Department of Justice when the case was being handled there. The Department failed to support the Commission, first confessing error on behalf of the government and then taking a "neutral" position.

been costly to the railroads or adversely affected railroad operations. One of these was the proposal to require reflectors or reflectorized markings on the sides of railroad cars. This has been before Congress for several years, and evidence before Examiner Vinskey indicated that such a requirement could cost the railroads from $30 million to $200 million.

The proposed report pointed out that reflectors, to be effective, would have to be kept clean—quite a job because railroad cars "move through dust, rain, sleet and snow, are subject to the overflow of chemicals, acids, oils and other substances . . ." and would thus "need constant cleaning, care and replacement." All of which made it "doubtful" to Examiner Vinskey that a reflector requirement would "serve any useful purpose or justify the expense."

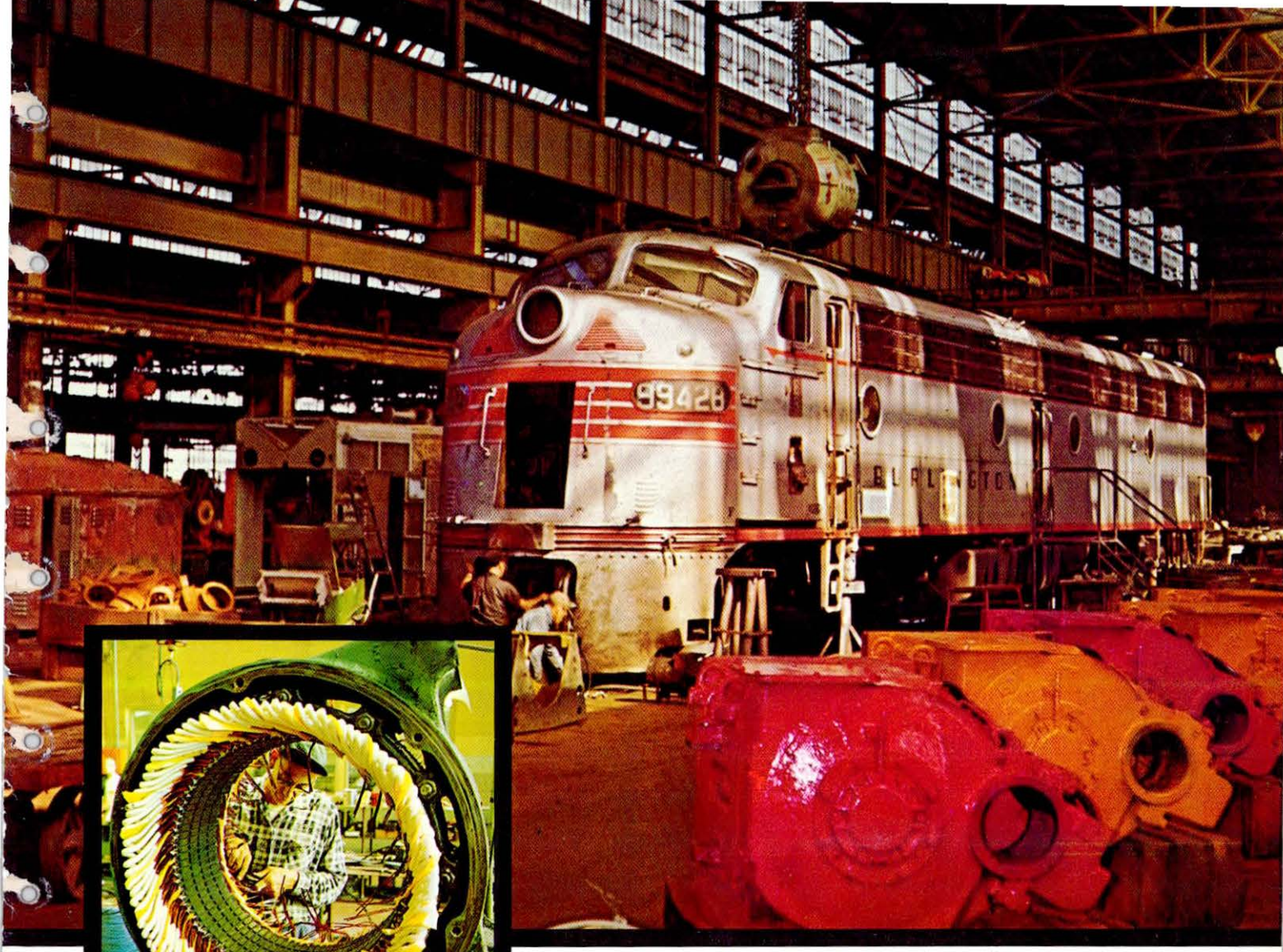
● **Train speeds.** Another proposal rejected by the examiner called for restriction of train speeds. Mr. Vinskey, as he put it, was "not convinced that the prescription of maximum speeds for trains or the imposition of any restrictions on train speeds would materially aid in reducing the number of rail-highway grade crossing accidents because reports issued by the Commission show that trains involved in these accidents were traveling at variable speeds, from 4 to 90 m.p.h." The evidence indicated that, in most of the grade crossing accidents, the speeds of all types of trains range only from 1 to 9 m.p.h.

This led the examiner to a conclusion that "train speeds do not materially contribute to the causes of accidents."

"The prescription of maximum speeds for trains would interfere with the rail carriers operating rules over which this Commission has no jurisdiction, would impede the flow of interstate commerce and would in effect place the railroads at a disadvantage competitively with other modes of transportation, particularly motor carriers. It is suggested that train speeds should not exceed the speed permitted on intersection streets and highways when operating in areas where there are rail-highway crossings at grade. Such a restriction would prevent the trains from operating economically."

● **Train brakes.** An issue of "train brake performance" was raised in the case, and it inspired a suggestion that the Commission consider the establishment by regulation of reasonable stopping distances for all trains." Examiner Vinskey rejected the suggestion with this comment:

"This record is devoid of any evidence to the effect that defective railroad equipment caused or contributed to the cause of any grade crossing accident."



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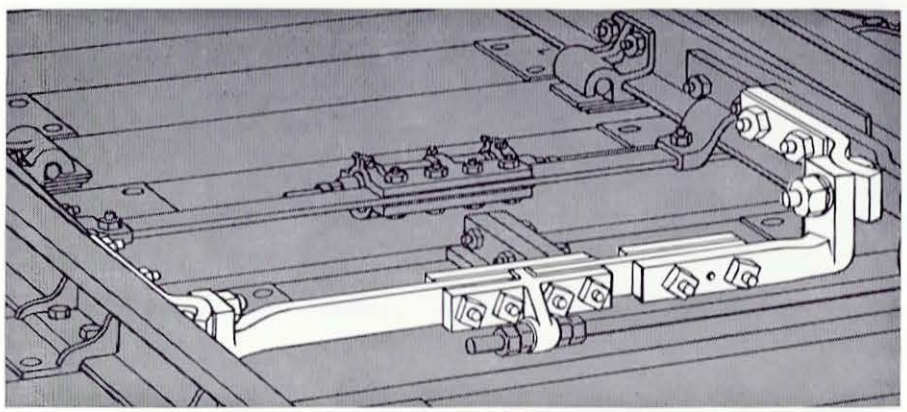
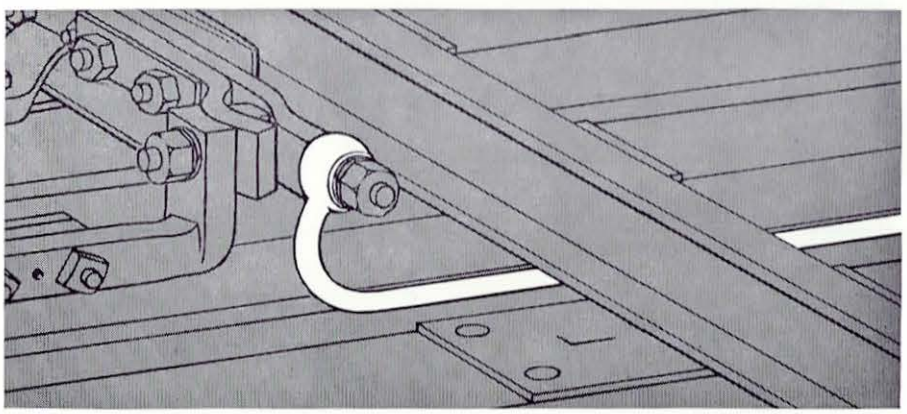
18 years' service with only three minor complaints



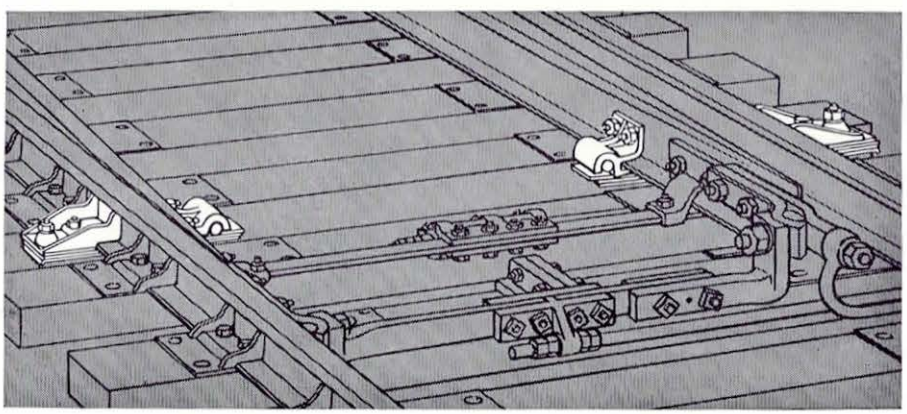
Style U swivel front rods are strong enough to keep switch points vertical even in rugged mainline service, yet the design allows enough free movement to eliminate excessive strain. Exclusive T-bolt swivel connections at both ends have low wear because of extra-large contact areas. Can be applied to spring, hand-thrown, or power switches. Of the three failures, all minor, one was due to dragging equipment.

12 years of perfect, trouble-free service



Rubber-mounted point detector rod eliminates rod breakage due to wheel shock and vibration. The eye of the rod has two rubber washers that absorb vertical shock without affecting the precision of point checking. No failure reported since introduction in 1951.

27 years' service with a minimum of maintenance



Style R roller bearings greatly reduce friction so it's easier to throw the switch. Less power is needed, and wear is reduced on all the connections and the operating mechanism. Easy to install and simple to adjust, the only maintenance these bearings need is an occasional greasing and tightening.

WABCO

UNION SWITCH & SIGNAL DIVISION
PITTSBURGH 18, PA./ Westinghouse Air Brake Company

Bootleg Trucking: Starve It to Death

A quick and relatively inexpensive way of putting the illegal truckers out of business—according to W. A. Ryan, traffic manager of Sunkist Growers—is simply to stop using their services.

The traffic manager of an organization with a $40-million annual freight bill has a quick, simple and cheap way of fighting the complex, still-growing problem of bootleg trucking. His proposal: Quit using the bootleggers.

William A. Ryan, traffic manager of Sunkist Growers, Inc., doesn't scorn the need for enforcement efforts, nor does he take an absolute position against more restrictive legislation.

● **Users hold the key.** But, he believes, the "key to this whole problem—and the quickest way to lick it—lies in the users of transportation. Let's educate not only the shipping clerk and the traffic manager, but the head of the company as well. Let's get them to stop supporting illegal transportation, and many of these activities will die for lack of economic nourishment. Obtain this cooperation and the clamor for more laws and the expenditure of more public funds for increases in enforcement personnel could be greatly stilled."

Adequate enforcement staffs should be maintained, he emphasizes—"but enforcement can be time-consuming and expensive, whereas non-use is the least costly means of putting the bootleg operator out of business."

Mr. Ryan, addressing a Transportation Association of America institute in San Francisco, called attention to established guidelines which have "substantially reduced" the problem of testing a questionable transport activity's legality. Definite guidelines have been set in a number of instances, he noted, "and their plain language makes it difficult for any responsible user of transportation to hide behind the excuse 'We didn't understand the law.' Today, every reputable business enterprise must be expected to know the difference between legal and illegal transportation. The traffic manager who fails to keep himself informed on this subject is not doing his job and is doing a disservice to his company."

● **Check-list of legality.** Sunkist's traffic manager provided a check-list for determining an activity's legal status—starting with the basic "observe the guidelines and the provisions of the Interstate Commerce Act." Among his other points:

- Such operations as buy-and-sell are "patently illegal."
- Corporate documents may, in some cases, show that an organization fails to meet established tests of legality. But, where the documents meet the test, investigation must go further, because "it's not what you say you're going to do, but what you actually do that counts."
- Traffic managers should guard against ignoring established guidelines merely because they're liable to be reversed—and they should shun the attitude of taking a chance on a questionable activity because the penalties are light if and when the activity is ruled illegal.

Much of Mr. Ryan's attention went to cooperative and shippers associations. A number of these groups, he noted, "have been in existence for years and [their] operations have been found to be perfectly legal. With these there can be no quarrel or apprehension. My concern is with those associations which have sprung up in the past few years whose activities I felt were at least questionable, if not illegal."

● **Advice to 'joiners.'** One of his points of advice to companies joining an association: "Participate actively in its affairs. Keep yourself informed of what it is doing. Exercise a strong voice in its direction. One of the conditions for the exemption [from regulation] is that the members must possess and must assume, jointly and severally, the essential risks entailed in conducting such operations. In too many instances, that right and ability have not been exercised by the membership and that fact has been challenged by the ICC in the course of its investigations."

Mr. Ryan was joined in his attack on the bootleggers by two other men whose activities bring them close to the problem—Gail H. Crawford, executive vice president of Ringsby Truck Lines, Inc.; and Noel A. Clark, of the Nevada Public Service Commission.

Current estimates, Mr. Crawford pointed out, indicate that there are "from 5,000 to 30,000 bootleg operators on the prowl in this country, transporting any commodities they select, over any routes they choose, at rates they want to charge."

● **Carriers, public lose.** Regulated carriers, he said, feel the impact in siphoned-off revenues, declining profits. Rates have to be increased—"and the general public suffers. If this process is permitted to continue indefinitely, succeeding rate increases will discourage shipper use of regulated carrier service."

Moreover, Mr. Crawford declared, "the public interest suffers because the great bulk of small shippers who do not have the ability or capital to employ their own means of transportation for psuedo-private carriage are then forced to meet the higher rates brought about by those who have evaded regulations. The benefits of competition will not be realized because service and rates will be adjusted to the more profitable and more easily serviced commodities and communities—leaving fringe products and areas without adequate transportation."

Ringsby's executive vice president sees no cure-all for bootleg operations—but he hailed the work being done by such groups as the Committee Against Unlawful Transportation and the Committee on Transportation Practices.

● **Action by shippers.** Mr. Crawford's proposal: Shippers "should become more aware of what is legal and what isn't. . . . Positive action by the shipping public in supplying early information to the enforcement committees would assist in eliminating more of these bootleg truckers."

Nevada Commissioner Clark called for an all-out drive on the bootleggers. As the technology of better enforcement improves, he said, "the cunning of the unlawful carrier . . . moves along at about the same speed."

And as he sees the problem, "there is only one sure way to stop the movement of unlawful traffic by motor carriers—and that is [that] whenever a carrier is apprehended in unlawful practices his equipment must be impounded and the goods either transferred to an authorized carrier or taken to a warehouse until it can be moved by accepted methods."

Commissioner Clark also warned that "we must drive home to the shipper that at any time he engages the services of an unlawful carrier, he is subjecting himself to possible losses—and even possible law suits—where most such carriers have neither cargo nor public liability protection."

Shippers Want More Experimental Rates

A survey of industrial traffic men shows almost unanimous support for legislation to encourage more rate experimentation. Most shippers polled also favor deregulation of minimum rates.

The transportation-legislation package now before Congress carries strong shipper appeal—especially that part which would encourage more rate-making experiments (including publication of intermodal joint rates). Industrial traffic men responding to Railway Age's May traffic poll voted lopsidedly in favor of the rate-experimentation measure—62-to-1 with 2 abstentions. The poll also revealed:

- Substantial—though far from unanimous—support for the ending of minimum-rate regulation on the transportation of agricultural products and commodities in bulk.
- A strong feeling that shippers should raise a loud and clear voice on legislative matters affecting the transportation picture.
- **Realistic rate-making.** "We are in favor of experimental rate-making so long as it is conducted in a very realistic manner," says W. C. Cole, general traffic manager, Georgia-Pacific Corp., Portland, Ore. "After all, rate-making is a very cold-blooded business matter of pricing transportation so as to maximize both carrier revenues and the potentials of industry and commerce. Proposals such as contained in Senate Bill 3342, Section 9—'experimentation in diminished differentiation among commodities, in methods for determination of distance through use of geographic grids and geometric formulas or other nontraditional techniques well suited to condensed tabulation or application of automatic data processing . . .'—may well be suited to fill the needs of the military and other branches of the government, but proposals such as this are nonsensical day-dreaming so far as business generally and its transport pricing needs are concerned."

G. W. Albertson, general traffic manager of the F. W. Woolworth Co., New York, casts a yes vote for experimental rates "as well as joint intermodal rates and services—subject to ICC safeguards." Walter K. Cabot, general traffic manager, Johnson & Johnson, New Brunswick, N.J., comments that the experimental-rate proposal should apply "to both commercial shippers and the government." P. M. Gish, director of traffic for American-Standard, Pittsburgh, would like to see more rate innovation in piggyback service, as well as "agreed or contract types of rates and other incentive methods."

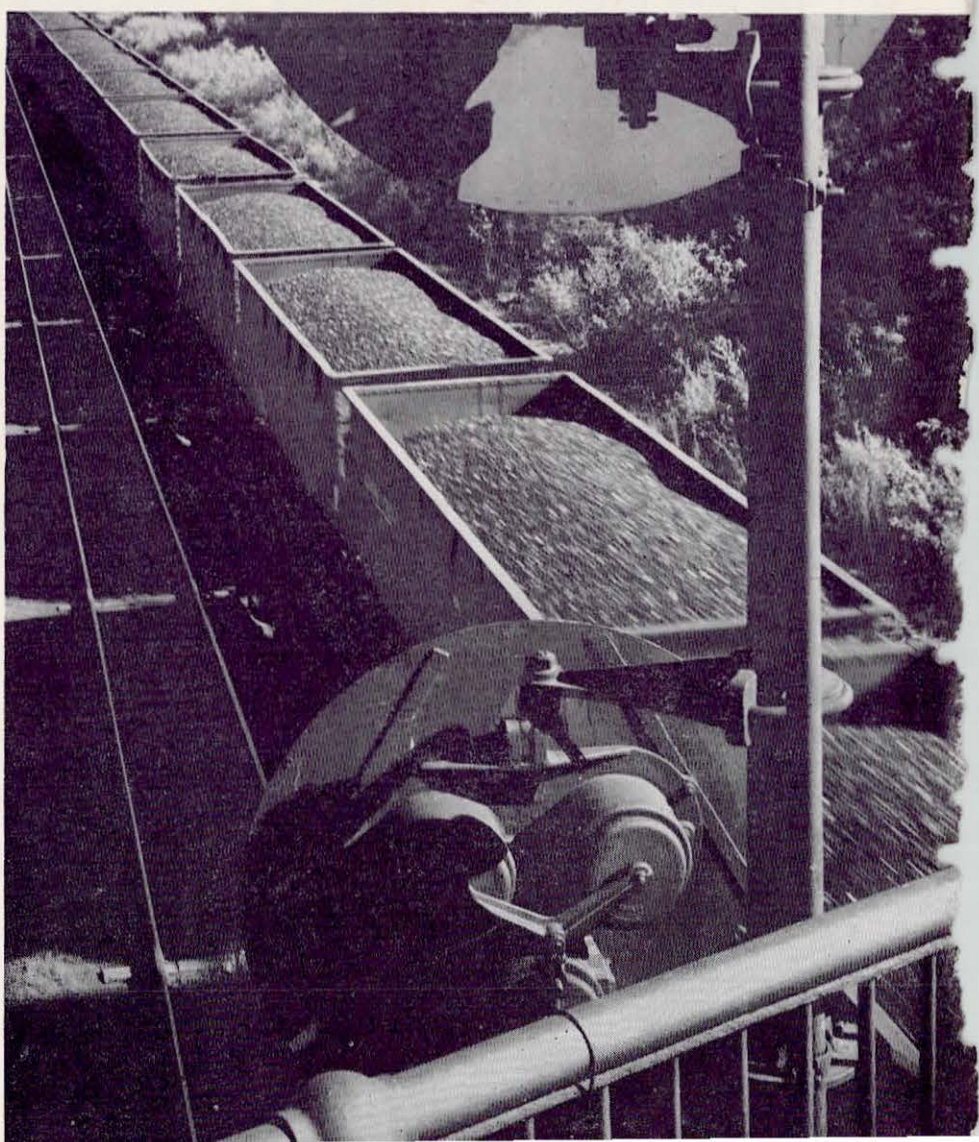
"The only real charge against experimental rates," comments E. E. Wyatt, consultant for the Houston (Tex.) Merchants Exchange, "is that one shipper may ship one car and another ten cars of the same commodity. Naturally, it is rough on the smaller shipper. Maybe some form of average agreement based on total cars shipped over a period of a year could be worked out so that the smaller shipper would be able to compete."

- **Railroads chided.** Arthur C. Roy, general manager, traffic, Pennsylvania Glass Sand Corp., is among those supporting the experimental-rate proposal—as well as minimum-rate deregulation. But he adds:

"I sometimes wonder, when involved in day-to-day rate negotiations with rail carriers, as to whether or not they are serious about this legislation as they are now not exercising the powers that they presently have under the Interstate Commerce Act. . . . The same old 'disrupt the rate scale,' 'adversely effect revenue of other railroads,' 'would result in requests to reduce rates on other movements,' are all too common. Only a few carriers seem to act with any sincerity in moving on a 'meet the cost plus profit' basis and encouraging incentive loading. . . .

"How many experimental rates have been tried? How does anyone know whether they would be protested—simply because 'agreed' rates were turned down? Trainload rates were

SPECIAL RATES on coal have proved valuable to both shippers and railroads.



turned down at one time, too."

● **'The field is wide.'** "More experimental rates—yes, definitely," says V. M. Steehishin, of Canadian Transportation Service, a Winnipeg-based traffic and transportation consultation firm. "Experiments with things like incentive rates should be encouraged to ascertain if the 'shipper's lots' demanded in the 1880's are realistic today. Many commodities which traditionally move on a reasonable basis could perhaps be more economically handled if 'off season' rates were offered to encourage a more regular traffic flow and more efficient use of carrier facilities. The field of experimentation in rates is wide and it is virtually untouched."

Deregulation: pro and con

The minimum-rate-deregulation proposal is supported by 48 respondents to the May poll, opposed by 15.

Frank T. Day, traffic manager of Warner & Swasey Co., Cleveland, sums up the feeling of many who favored the deregulation measure: "In the area of rate-making, I believe all modes of transportation should have equal competitive advantages. If the trucks and barges are free from certain rate regulations, then the railroads should be equally free."

● **Safeguards.** A number of shippers who favor deregulation also point out the need for safeguards. As Mr. Wyatt (Houston Exchange) puts it: "It would seem that minimum-rate deregulation would be highly proper when rates are being fictitiously held up, when some other form of transportation can, *at a profit*, handle the traffic by deregulation. If the deregulation takes place, and one form of transportation decides there is no further competition from other carriers, by whatever form, then they should not be allowed arbitrarily to raise the deregulated rates which put them in active competition for the traffic involved."

"Less regulation is the answer," says Howard Pollen, traffic manager, P. Ballantine & Sons, Newark, N.J. "Carriers should have the right, without government interference, to establish equitable rates and minimums to insure themselves a reasonable profit. We shippers will purchase transportation from those offering the lowest cost together with satisfactory service."

● **To each its own.** Graham Davis, manager of traffic and purchasing for West Virginia Pulp and Paper Co., New York, couples his affirmative vote with a plea that each mode of transportation be permitted to perform that service for which it is best suited: "We have existing rail and waterways systems that are not being utilized at the desired level for profitable transportation of goods. These extensive systems are ideally suited for handling bulk commodities. It is important that they be permitted to compete for traffic on the basis of price as well as service. The trucking industry also has its economic position in our country's transportation system, and they, too, should be permitted to compete; but it is in the best interest of all that they not be given preferential treatment. Our interstate highway system is being developed at a tremendous cost, and we don't want its arteries to be clogged by too much commercial transportation that doesn't have to pay its proportionate share of the capital investment or maintenance costs."

Concern over the effects of deregulation on small shippers is noted by some traffic men who oppose the proposal. For example, E. J. Hanson, traffic director for the Grand Forks, N.D., Chamber of Commerce, fears that "deregulation will result in chaos with the big shippers increasingly well served and the small going out of business. The transportation agencies would knock each other out going after big accounts until they all were on such a narrow margin that they would have to abandon their small shippers or jack the rates on that kind of traffic to a very high level."

An Ohio shipper, who wants to remain anonymous, agrees that "elimination of minimum-rate restrictions could result in chaotic conditions—better to impose them on other modes, i.e., trucks and barges."

● **Change of heart.** E. M. Burk, traffic manager of Wyatt Industries, Inc., Houston, Tex., says that at one time he would have favored deregulation—"but after some of the examples I have seen in recent years of shortsightedness on the part of the railroads, I would hesitate to recommend this step."

E. E. Allison, director of traffic for Anchor Hocking Glass Corp., Lancaster, Ohio, opposes the deregulation proposal because it doesn't go far enough—it "should be extended across the board, and not be confined to bulk and exempt commodities."

At the other end of the spectrum, C. F. Witmyer, traffic manager of John W. Eshelman & Sons, Lancaster, Pa., comes out for regulation of "all modes of transportation . . . except private trucks and agricultural products only from the farm to primary market. Most of the chaos is now created by exempt and gray-area transportation and to deregulate can only create more chaos."

● **Shipper's dilemma.** W. M. Johnson, general traffic manager of the Gulf Oil Corp., Houston, who abstained from voting on deregulation, points up a dilemma confronting some shippers. "Petroleum companies," he notes, "have as customers all competing modes of transportation and must not incur the ill will of any."

MAY TRAFFIC POLL

PROPOSITION

Two major Administration-sponsored, railroad-supported transport bills are now before Congress. One would end the regulation of minimum rates for transporting agricultural and bulk commodities. A second, designated the "Transportation Act of 1963," would — among other things — encourage rate experimentation, and the establishment of intermodal joint rates. There has been some feeling that shippers have not taken a sufficiently active roll in apprising Congress of their views on these proposals.

QUESTIONS

(1) As a shipper, do you favor:

(a) Minimum-rate deregulation?

Yes	48
No	15
No comment	2

(b) More experimental rates —and establishment of intermodal joint rates?

Yes	62
No	1
No comment	2

(2) Do you think that it is a shipper responsibility aggressively to promote (or oppose) transport legislation?

Yes	53
No	8
No comment	4

Shipper's legislative role

Only eight of the May respondents go on record against shipper activity in support of (or opposition to) transport legislation—but there is some disagreement as to what form this activity should take.

A number of respondents feel that the legislative job can best be handled by shipper associations. F. L. Fruechtemeyer, traffic manager for the Andrew Jergens Co., Cincinnati, is among those of the opinion that "the shippers' posi-

tion on proposed legislation can best be presented by shipper organizations such as the National Industrial Traffic League"—except where the shipper disagrees with the association's position. Richard A. Stuart, general traffic manager, Whitehall Laboratories, New York, asserts that "the inference of complacency and indifference on the part of the shipping public does not appear to be borne out in view of action being taken by industrial traffic associations." Similarly, R. B. Webber, general traffic manager of the Grinnell Co., Providence, R.I., feels that legislative activity is "better handled through shipper groups or industrial traffic associations."

● **Shippers apathetic?** Other replies also indicate widespread satisfaction with the job the shipper associations are doing—but there are some who feel that shippers should act more aggressively, on their own.

"The apathy of shippers is unbelievable," declares David M. Daly, assistant vice president—traffic, Bristol Myers Products Division, Hillside, N.J. "In my own industry some 10 men with an inadequate budget strive endlessly to protect the transportation interests of several hundred companies. I feel certain this situation is typical of most industries. Shippers—and under this designation I include company executives—can really help by acquainting themselves with national transportation problems and making their views known to their Congressmen."

H. P. Gabriel, general traffic manager of the Hershey Chocolate Corp., Hershey, Pa., makes a similar point: "Too many times shippers fail to realize the power of making their voices heard. Most of us realize the plight of our transportation system, but with alternate modes of service available at our beck and call, we seldom recognize the over-all problem. Many have not been sufficiently hurt to be awakened to carrier needs.

"Transportation is as vital to our individual lives as bread and water, yet the public has not been educated to this fact. Who will take the 'bull by the horns' . . .? No single traffic group has made an effort to enlighten the public on the dire situation confronting this industry. What we need is a good leader, a good publicity agent to pull together these views so that one industry will not be just a lone cry in the dark."

● **Caviar vs meat.** Arthur B. McCourt, treasurer of Smith Brothers, Inc., Poughkeepsie, N.Y., puts himself down as "definitely" in favor of aggressive legislative work by shippers, and goes on to say:

"It is often said that we have an over-capacity of transportation in this country. The overage is in the 'caviar and champagne' type of transportation. If we expect to compete successfully with other nations, we had better pay more attention to the railroads, which are the 'meat and potatoes' of transportation. Since it is the shippers who are paying for all this, they should obviously take an active part in promoting remedial legislation."

Dwight L. Koerber, executive secretary of the Coal Traffic Bureau, Pittsburgh, sees transportation legislation as a legitimate area of interest to all citizens, but adds: "His [the shipper's] position as a citizen in possession of special knowledge—and also as one who represents a very important segment of the public interest—carries with it, I believe, a non-delegable duty to communicate directly with his employer and his congressman on major transport issues. In arriving at a position on a particular piece of legislation, I feel he should first examine its general purpose. If he is in accord with that purpose, I feel he should so state even though he may also raise bona fide questions about some of the measure's provisions. Too often, it seems, we get so wrapped up in and confused about technical interpretations, that we mistakenly conclude we aren't competent to speak about the very condition we know about which the bill is designed to meet. Result—we say nothing, and the final outcome is largely determined by those who do not represent the shipping public."

● **Limited interests.** Edward P. Mickens, traffic manager of Coates Board & Carton Co., Garfield, N.J., takes the position that it is "a shipper's duty to watch legislation to protect his interests [but] every bill does not affect every shipper in the same degree."

R. G. Scearce, traffic manager of the Apple Growers Association, Hood River, Ore., thinks the shipper "should be aggressive in promoting legislation that concerns his own operation and generally benefits industry. The past record of industry support of proposed legislation has been a waste of time, as evidenced by the disregard which recommendations, resulting from economic studies, have received."

George H. Cunningham, general traffic manager of the Sterling Drug Co., New York, notes that shipper organizations appear to be doing a good legislative job—but "shipper, compared to carrier, participation is insignificant.

"Perhaps this stems from a reluctance on the part of many companies to become embroiled in legislative activity that does not directly affect their primary business. Perhaps, too, the feeling is that they have enough bothersome legislative matters of their own without getting into the fields of others. In any event, the giant, the sleeping public, as represented by the users of transportation, needs awakening. But I just wonder whether in the long run the carriers, all forms, would really want a fully awakened and aggressive 'public' in the forefront of matters of

An Effective Image Is

DUSENBURY

Given a choice, flying strikes me personally as a poor way to get from one place to another, particularly since you wind up so often in a third place. I travel 36,000 miles a year by train. Most often I take the Southern's "Crescent," getting on at Spartanburg, S.C., rain or shine, at 4:34 one afternoon, landing in New York City—*in* the city—at 8 the next morning. To this, all an airline could add would be the probability of the dubious pleasure of spending the night in a New York hotel (after a long and tiring fight with traffic from airport to city terminal to hotel lobby to room).

However, an airplane is so much faster than a ship that I found myself on one several weeks ago en route to London. Landing at London Airport for the first time, I was looking at things with fresh eyes—and must admit I was struck by the high level of design of such adjuncts to air travel as the bus that took us from plane to terminal, the terminal's architecture, the furnishings of the public rooms, the uniforms of the personnel. The smart appearance of all these things said efficiency, progressiveness, successfulness.

Riding the bus into London, I couldn't get my mind off the idea that for a vast enterprise like the airlines or the railroads to succeed with the public, almost the first requirement was an effective image (that the very word image is unavoidable today is some measure of its new importance). The railroads had lost something when the power and glory of the steam engine had to go. The airlines had gained something when windtunnel tests dictated their handsome, streamlined forms.

Still brooding on the decisive in-

Today's First Requirement for Success

fluence of visual image, I dropped in the next morning at one of my favorite London haunts, The Design Center of the Council of Industrial Design, just off Piccadilly Circus. Here the Council presents a succession of the kind of design exhibitions you see at New York's Museum of Modern Art every now and then. You're apt to find there furniture, kitchenware, flatware, china, luggage, textiles. In the mood I was in, it was almost a charade on the song of "Wishing Will Make It So" to discover that the hit of the varied show on display was a large exhibition of new *railroad* designs. This corner of the show was absolutely jammed with people, many of them waiting in line to go through a full size section model of a new coach design. I joined the line, meantime looking around at the lively photographs, drawings and placards that covered the walls.

The next thing that caught my eye was a uniformed attendant, wearing an outfit entirely new to me. It had something of a railroad look, but was also very modern and authoritative looking, somewhat in the manner of German uniform design. It turned out that this was an experimental design for a station inspector's uniform. It was really impressive, with none of the phony military braid-and-brass look of a movie theatre doorman. Stripped of its insignia, you could imagine the cap on the head of an army officer of almost any continental nation. A flap that could turn down to cover the ears and back of the neck looked particularly handsome and functional. Color of the entire outfit was grey-blue, with the cap and jacket on the light side, the trousers on the dark.

The attendant, a fine-looking man himself, obviously relished wearing the uniform. He showed me a booklet that detailed some of the research that had gone into the development of this and other proposed uniforms. One fact that turned up was that virtually all continental systems require personnel to share the cost of their uniforms—on the theory that the men would therefore take better care of them.

Getting into the car model was slow going, as the people ahead were fascinated by the seats, the lights, the ash trays, and were trying everything. How good was the design? That's always a matter of opinion. My own was that the design was generally smarter and more successful than that of the TWA jet I'd flown the day before.

BOLD USE OF COLOR

New designs for freight cars, locomotives, stations and graphics (labels, bulletins, signs, etc.) were represented by big, colorful drawings and photographs. The designs were many and varied—and some of them were already realized in new equipment. If I had to sum the designs up, I would say that they had a very *consciously designed* look. Nothing had just happened. Somebody was very clearly in charge of every aspect of appearance.

And the result, I thought, was the very image of authority, competence, success. Color, in particular, was used with great boldness and sureness—both as to where it was used and how it was used. These wall displays were getting close attention—in part, no doubt, because someone had done a conscientious captioning job.

When I looked for a place to sit and read the booklets available, I found a contemporary-looking seat that turned out to be a mock-up of a design for station waiting rooms.

The literature was excellent. What we were looking at, I learned, were some of the good works of the seven-year-old Design Panel of the British Railways. The panel consists of four members: a member of the central British Railways Board, two chairmen of divisional boards, and a design professional, BR's principal design officer. The panel could propose, it couldn't dispose; it was purely advisory. It was a hard core, adding to itself design consultants as needed. That it had been broadly successful was beyond doubt.

Two statements by Dr. Richard Beeching, chairman of BR, seemed especially pertinent:

"You can get an economy in capital expenditure through good design. The product lasts longer and works better, and is better value for money. *You see, design is largely thought, and thought is comparatively cheap.* [The italicizing is mine.]

"There is little doubt that if businessmen travel well they will look more kindly on our freight services."

Dr. Beeching is particularly keen on the new uniforms. On one hand, they offer a big lift for the personnel that wear them and the public that views them. On the other, they can be put into wide use very quickly.

He summed up the design enterprise neatly when he said: "There is a great dividend to be had at the cost of thought and taste and without the expenditure of much money."

All this reminded me of the force of image in my own recent travel experience in the U.S. A year ago, I boarded the "Crescent" in Charlotte, N.C. for the first time. It was a dismal day. It was raining—inside the station as well as outside; there were many leaks. Strips of peeling paint hung from the ceiling like stalactites.

It was a scene to inspire Charles Addams. What I didn't know was that all the effort was going into a new station abuilding just up the line.

Today, when the "Crescent" stops alongside the Southern's new Charlotte passenger station I see a sparkling new building composed to a great extent of modern precast concrete units. It looks just wonderful. It says something that, without it, all the advertising men in the world couldn't say.

—George Dusenbury

transportation legislation. Right now, the railroads would like public help. Next year or the year after, they may be suggesting that the public stay out."

● **Paradox.** A need for more concerted action by shippers on transportation matters in general is noted by Arthur M. Texnow, traffic manager, Manufacturers Association of Erie (Pa.): "Paradoxically, all shippers gripe and moan over the ever-increasing transportation rates—yet most of them are not available when needed for concerted action to oppose proposed mass increases, claiming they are more importantly occupied with problems of productivity, quality control, automation, etc. Eventually, to hold down 'exorbitant transportation costs,' they resort to schemes—often illegal or dangerously close thereto—labeled as private trucking, thereby adding to their already complex problems of transportation."

GROWING NUMBER of hydraulically cushioned cars go into service on the Southern; sliding center sill and hydraulic

New Cars for Fragile Freight

A fleet of box cars with long-travel cushion underframes, increased by 600 units so far this year, is enabling the Southern's shippers to make substantial savings in transport costs.

The Southern is steadily expanding its fleet of cushion-underframe box cars. "Sliding-sill box cars have put the Southern back in the business of handling fragile freight," D. W. Brosnan, president, commented recently while reporting that his road's total ownership of such cars is now 1,200 units.

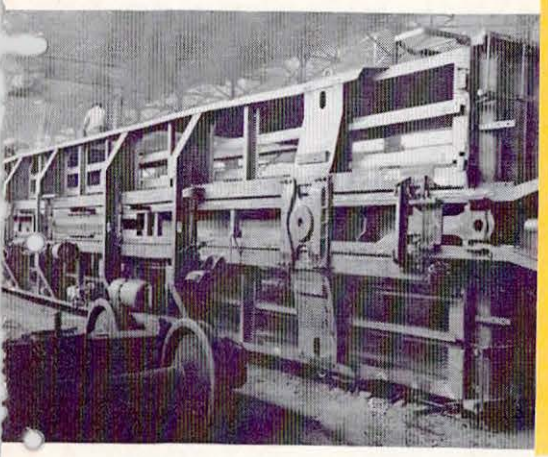
● **Saves money for shippers.** In a recent ICC hearing involving the cars (RA, May 13, p. 9), the Southern explained that its investment of over $17 million in the fleet of 815 cushion-underframe cars which it then owned had been made because "this is the only piece of equipment that has been developed that will handle shipments safely and efficiently. . . It has saved the shippers thousands of dollars in blocking and bracing. . . Many commodities which formerly required blocking and bracing in conventional cars can now move in the 30-inch-travel cushion-underframe cars without any blocking or bracing whatever."

While Pullman-Standard was recently making deliveries of 500 50-foot cars, the Southern announced an order for 100 60-foot cars. Production of the longer units has just started.

The 50-foot, 70-ton cars, all built at Bessemer, Ala., since March, are characterized by their exterior side posts, single-sheathed bodies, and Hydroframe-60 cushion underframes. The Hydroframe-60 underframe has 30 inches of hydraulically cushioned travel in each direction.

Reduction in light weight to 69,800 pounds from the 74,400 pounds of the Southern's original order for 200 similar cars (RA, Jan. 2, 1961, p. 22) was accomplished by decreasing the number of side posts on each side of car from 20 to 10 and eliminating the exterior sheets which cover the corrugated ends. Other changes include 10-foot aluminum plug doors instead of the sliding

unit go into car's fixed sill (below).



Southern's Solution: Long Travel

The Southern has been active in the development of long-travel cushion underframes since 1955. After playing a major role in locating a large transformer manufacturing plant on its line at Athens, Ga., the road found that all outbound traffic had been diverted to trucks because of the damage to shipments incurred during rail hauls. To recapture this traffic, the Southern first considered assigning some 10-inch-travel cushion-underframe cars, which it already owned, to transformer service. The cars were found incapable of reducing the effect of a 12-miles-per-hour switching impact to that sustained by lading in a car impacted at 4 miles an hour.

The Southern then began to work with the Franklin Institute, Southern Research Institute, Bendix and Pullman-Standard for a complete solution. The goal was a reduction of longitudinal shock levels to those sustained by motor carriers—an acceleration of about 0.7G. Lateral and vertical accelerations of railroad cars were found already to be comparable to those experienced in highway vehicles. Even at the railroads' recommended 4-miles-per-hour coupling speed, lading accelerations are still in the 1.5 to 2G level.

Research indicated that the greatest benefit is obtained with the longest possible travel. Out of all this evolved the 30-inch-travel cushion underframe. The first 200 cars of that type were placed in service late in 1960 (RA, Jan. 2, 1961, p. 22).

In 1961, first year that the cushioned cars were operating, Southern freight-claim payments dropped by $456,201 from the $3,813,724 that had been paid in 1960. The 30-inch cushion underframe has been rated as a "factor" in this reduction. The road emphasizes that the car permits handling many expensive commodities such as electric meters, electric distribution transformers, newsprint in rolls, bakery goods, drugs in glass containers, olives in casks, furniture, leaf tobacco, and syrup in drums.

Typical is the experience with Westinghouse Electric, the shipper at Athens, Ga., where the problem originated. A recent ICC report concerning safety appliances on these cars (RA, May 13, p. 9), said that "The first Hydro-frame-60 car placed in service was used for a test shipment of crateless transformers from . . . Athens to Westinghouse at St. Louis, a distance of 835 miles. The shipper first used a floating-load pattern in one end of the car and had transformers sitting loose on the floor at the other end. Later the floating load was discarded in favor of all of the skids being loaded without any banding or bracing. An impact recorder, placed in the car showed no impacts, and chalk marks around many different skids showed none of the transformers moved even a fraction of an inch."

Additional tests were made, and Westinghouse agreed to divert traffic to rail provided Hydroframe-60 cars were used for all shipments. "This is new business which has been picked up by use of these special cars and will only move by rail when this 30-inch-travel car is [supplied]," the report concluded.

The Southern has had a similar experience with General Electric outbound transformer shipments from the plant at Hickory, N.C. Here, again, traffic has been diverted from truck to rail.

type, and composition brake shoes instead of cast-iron. All structural steel used in the cars is low-alloy, high-tensile, except that in the center sill and draftsill components.

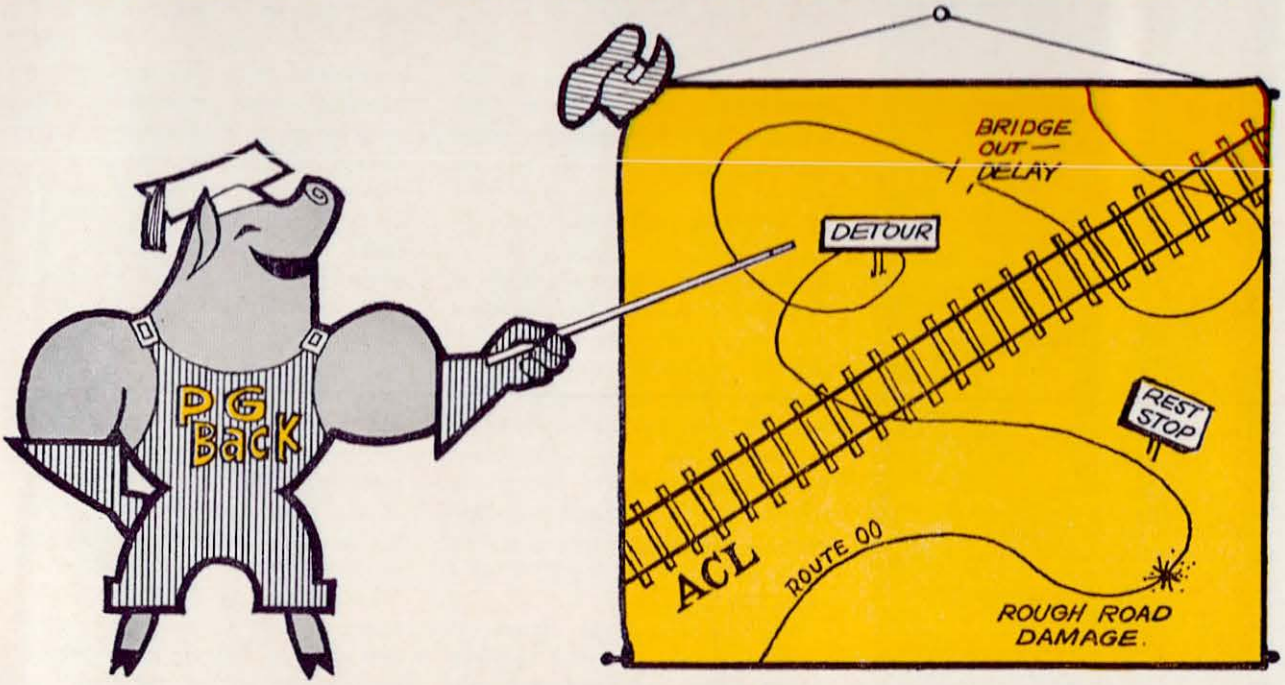
● **Underframe details.** The sliding center sill consists of two Z-26, 41.2-pound sections with top flanges seam-welded full length. Draftgear pockets and strikers are P-S welded design. The special couplers used have Type E head and Type F butt, modified for 43-inch shank and Y-45 yoke.

The stationary center sills are two Z-26, 41.2-pound sections, inverted so that the 13/16-inch flange becomes the top flange of the sill. The top flanges are joined at the bolster and crossbearers by top cover plates. The bottom flanges are connected at the bolsters by the body centerplate and at the crossbearers by channel connections.

Body bolsters are a welded design fabricated of ¼- and ⅜-inch plates. The four crossbearers, also welded assemblies, are formed of 3/16- and 5/16-inch material. Tops of crossbearers are contoured to permit continuous floor stringers between bolsters.

(Continued on page 25)

P. G. BACK: PROFESSOR OF GEOGRAPHY



...TELLS WHY COAST LINE PIGGYBACKING IS THE SHORTEST DISTANCE BETWEEN TWO POINTS!

The ancient Greeks discovered that the shortest distance between two points is a straight line. Today, more and more shippers are discovering that Piggyback by Atlantic Coast Line applies this principle to provide the shortest—and best—way to move goods... adding up to savings in miles, minutes and money. Your shipment moves from door-to-door without unloading or reloading... straight, fast, dependable delivery. Coast Line has 50 Piggyback ramps and access to many more... to make your delivery over the shortest route at the least cost. See your Coast Line agent today, or contact our Piggyback specialist, P. G. Back.

"Thanks for Using Coast Line Piggyback Service"

Write or call:
P. G. Back
Trailer Train Service
Atlantic Coast Line Railroad
Jacksonville, Florida

ATLANTIC COAST LINE RAILROAD

... serving the Southeast Coastal 6

Steel-Corr IS NOT JUST A GRAIN DOOR... IT'S A PROTECTION PROGRAM

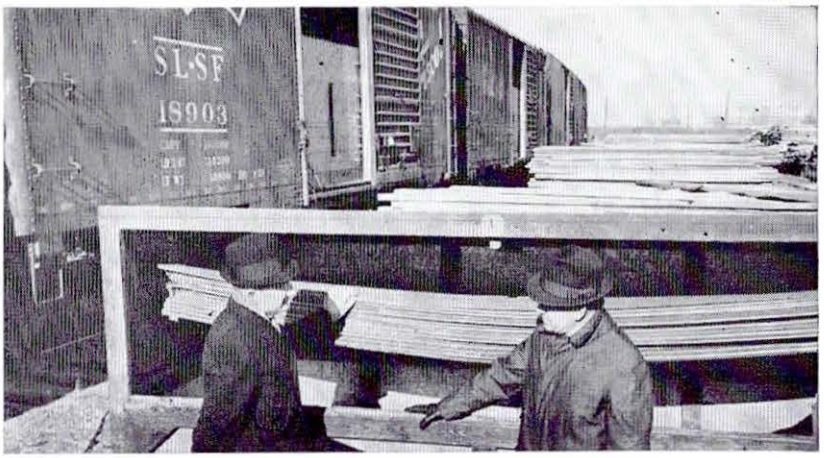
Many railroads are discovering that the Steel-Corr program protects budgets as well as grain.

Our suggested methods of inventory control, handling and distribution minimize grain shipping problems. And Steel-Corr doors assure sanitary, safe, easily installed doorway protection at low cost.

Contact our Methods and Costs Department. They'll be glad to explain how our thoroughly researched grain door program can help you deliver the goods in good order, and keep your budget in the same condition.

If you're not receiving our company magazine, INSIDE STORY, ask to be placed on our mailing list.

E. T. (Red) Walker, Assistant Regional Sales Manager, is a typical member of the International-Stanley Corporation Sales Staff. He, and his counterparts everywhere, help make the Steel-Corr protection program work for you.



Red Walker discusses grain doors at left, and inspects outdoor grain door storage bin above.

Proper Steel-Corr installation procedure is discussed with the cooper in photo at left (above). Red continues grain door program planning in the shed at trackside.

535

INTERNATIONAL-STANLEY CORPORATION

8401 WEST DODGE ROAD
OMAHA 14, NEBRASKA

U25B completes 8,000,000 unit miles on 6 major American railroads

General Electric U25B's are currently logging nearly one million miles per month on railroads spanning the country. To date, eight million accumulated miles have demonstrated increased revenue capacity and reduced maintenance to six of the nation's major railroads.

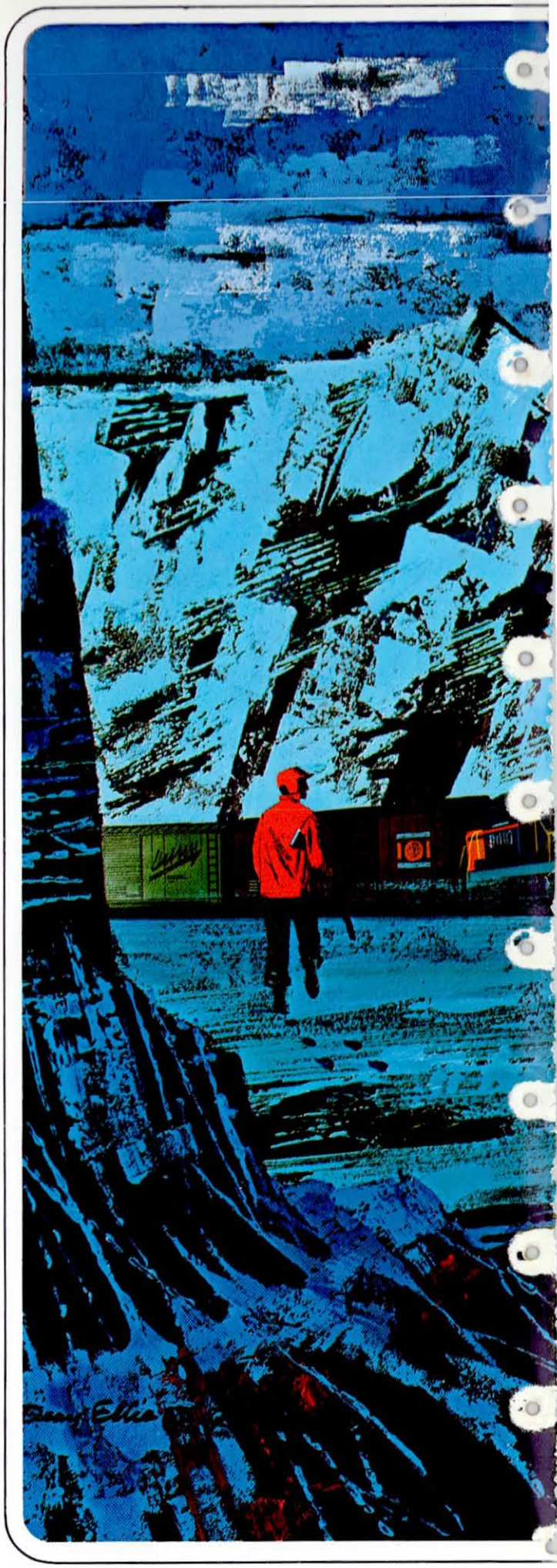
On one railroad, the increased power of eight 2500-hp U25B's resulted in the retirement of 17 older locomotives and a 10 percent reduction in scheduled running time.

During spot maintenance on another, three men are assigned to other jobs when the U25B's are scheduled. Design that reduces maintenance is the reason. The U25B has only four rotating electric machines above the platform, a primary air cleaner which requires no servicing, a simplified piping system and equipment pressurized to keep out dirt.

The all-new U25B can help your railroad move more freight faster, at lower cost. For information on how the U25B matches your railroad's requirements, let a General Electric transportation engineer prepare an application study for your consideration.

117-19

GENERAL ELECTRIC



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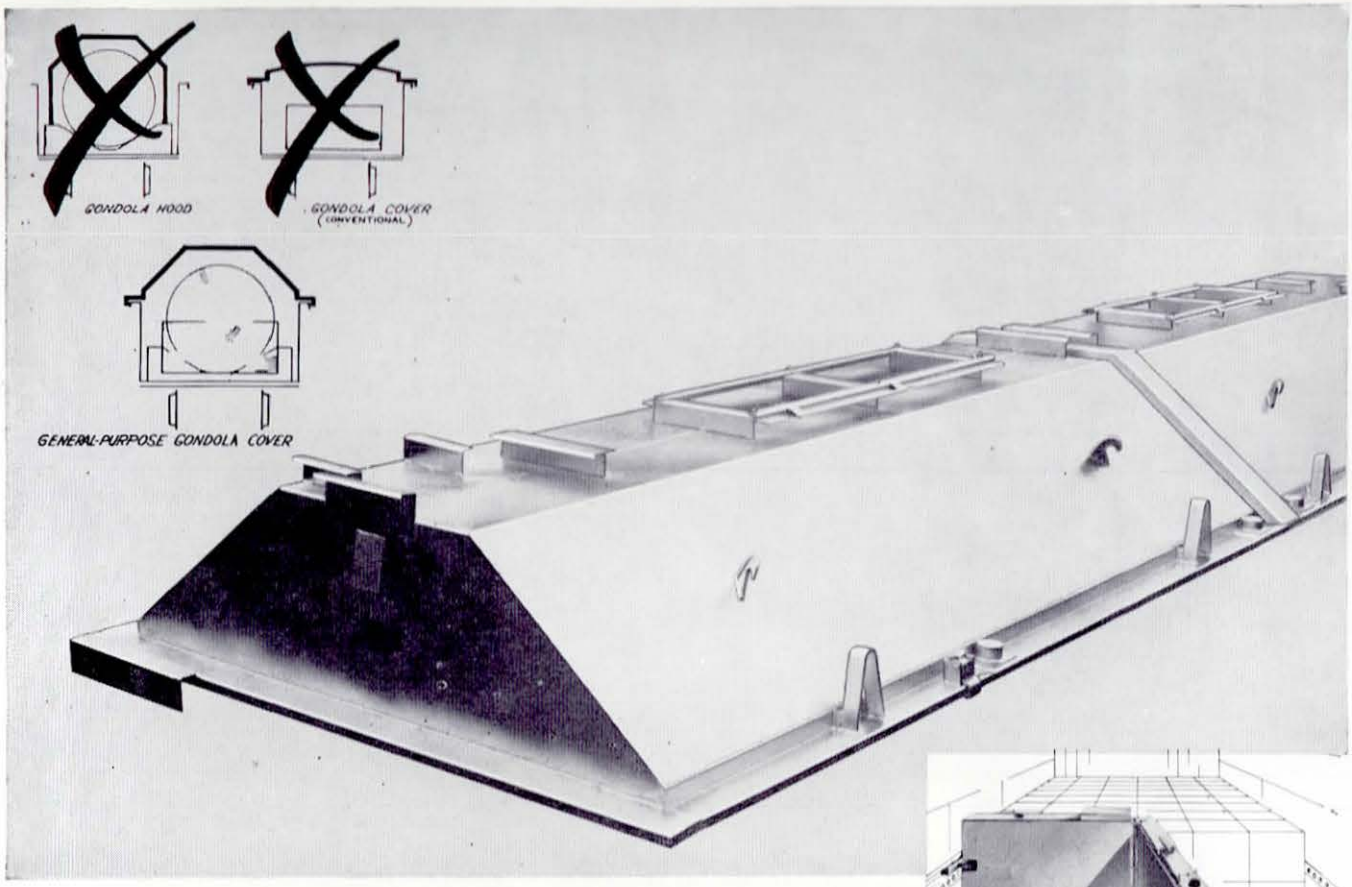
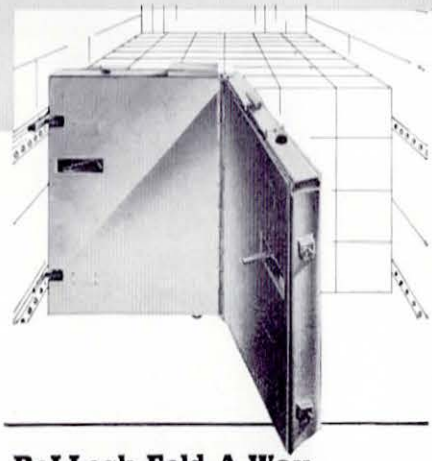


New Shunk-Yocar General Purpose (GP) Car Cover

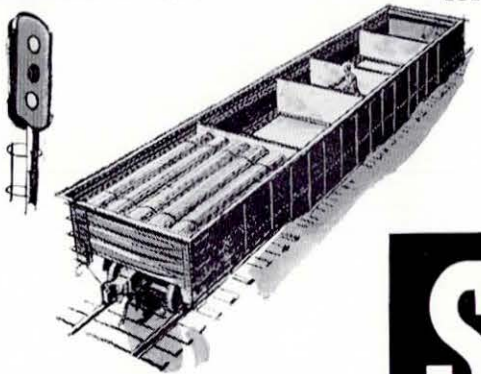


Replacing conventional and hood-type gondola covers is the new Shunk-Yocar General Purpose (GP) Car Cover, a three section open top cover designed to simplify your shipping operation.

The new design allows larger coil loading and higher car lading without extending the car sides. Gives you more versatility too . . . no need for various types of single-purpose hoods, roofs, and covers. With suitable hatches, open hopper cars can be converted to covered hopper cars at minimum expense.

The Shunk GP, with all steel, all welded construction, is tough enough to stand severe punishment, but is safe and easy to handle. It provides positive protection against dirt and weather, yet permits ample ventilation to prevent condensation. Cargo wrapping is unnecessary.

The General Purpose Car Cover is the latest addition to the complete line of Yocar damage control components, now being manufactured by Shunk . . . leading fabricator of steel products since 1854.



RoLLock Fold-A-Way Bulkheads for Boxcars

Shunk-Yocar Fold-a-way offers you a bulkhead that is low in cost, sturdy, easy to operate, and inexpensive to install. Visual inspection of loads is possible without moving the bulkhead.

RoLLock Movable Bulkheads for Gondolas

Easily moved into position on their case-hardened rollers along tracks, the Movable Bulkheads also feature positive locking and a surprisingly low installation cost.

SHUNK MANUFACTURING CO., INC. • BUCYRUS, OHIO

Subsidiary of Chromalloy Corp. • Teletype 419-569-0870

YOCAR Shunk

New Cars for Fragile Freight

(Continued from page 19)

There are also six floor beams, 4-inch Z-bars, between bolsters, and two Z-bar floor stringers on each side of the center sill which extend between body bolsters and pass over the tops of the crossbearers and floor beams. Two stringers each side of the center sill continue from the bolster to the end sill. Stringers are welded to the underframe cross-members and riveted to the end sill. The P-S 1-¾-inch nailable floor applied over these is formed of Cor-Ten steel.

• **Welded sides and ends.** Side sheets are butt-welded together and to the side sill and side plate. Side sheets are 3/16-inch, except for ¼-inch sheets which are used adjacent to the corner posts. Side plates are 4- by 3½ by ⅜-inch bulb angles reinforced through the doorway. Side sills are 4- by 4- by ⅜-inch angles extending from end to end. The side sill is reinforced with a 5/16-inch pressed angle 11 inches deep at center of car sloping to the bolster connections.

The ten side posts on each side are 3/16-inch pressed-hat sections welded to the outside face of the side sheets, side plate and side sill. Corner posts are ¼-inch pressed box sections. Door posts are 3- by 2½- by ⅜-inch angles, with a pressed stiffener. Back of each pressed section is a round steel bar which, along with the punched slots in the side sheets, form 336 lading strap anchors throughout the car.

Each end is composed of a 3/16-inch top and ¼-inch bottom plate with 4-inch corrugations and an inner lining of 3/16-inch plate. The ¼-inch bottom plate is flanged to form the integral end sill. Assembled ends are welded to the corner posts and roof sheets and riveted to the stationary center sill. Each end has eight vent holes.

The covered-hopper-type roof consists of ⅛-inch sheets welded to exterior carlines, 3- by 2- by ⅜-inch angles, and to top side chords and top flanges of the ends. Carlines are spaced on 41-inch centers for standard commercial lengths of aluminum running board.

One coat of chromate primer is applied to the entire underframe, including the insides of the sills, and one coat of hot-spray brown paint after the car is assembled. Exteriors of the sides, ends and roof receive one coat of primer, followed by one coat of hot spray finish paint to produce a total dry-film thickness of 2-¾ mils.

Partial List of Suppliers

Truck springs	Crucible Steel Co. of America
Side frames and bolsters	American Steel Foundries Scullin Steel Co.
Stabilizer parts	Standard Car Truck Co.
Side bearings	A. Stucki Co.
Wheels	Edgewater Steel Co. Standard Steel Works Div., Baldwin-Lima-Hamilton Corp. United States Steel Corp.
Axles	United States Steel Corp.
Roller bearings	Timken Roller Bearing Co.
Roller-bearing adapters	National Castings Co.
Couplers and yokes	American Steel Foundries
Trainline hose and fittings	Aeroquip Corp.
Draft gear, hand brakes	W. H. Miner, Inc.
Air-brake equipment, brake shoes and slack adjusters	Westinghouse Air Brake Co.
Brake beams	Chicago Railway Equipment Co.
Brake beam wear plates	Unit Truck Corp.
Brake rod jaws, truck brake levers, bottom connection	Schaefer Equipment Co.
Steel ends and roof	Pullman-Standard
Running boards and brake steps	Morton Manufacturing Co.
Side doors and fixtures	Camel Sales Co.
Flat neck bolts	McLean-Fogg Lock Nut Co.
Primer and paint	American-Marietta Paint Div., Martin Marietta Corp.
Stencil paint	E. I. du Pont de Nemours & Co.
Neoprene	Gates Engineering Co.

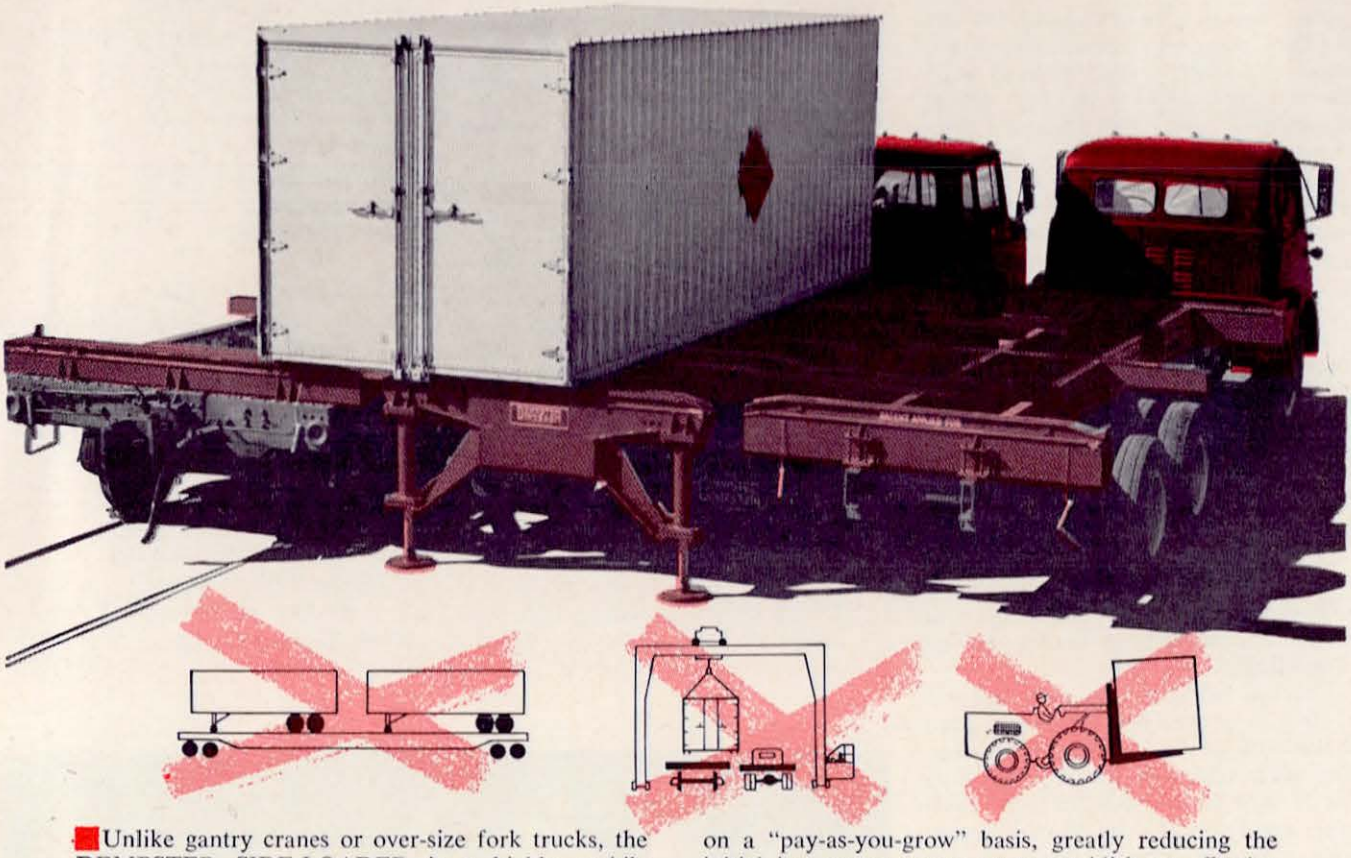
NEW CARS were inspected at Bessemer by (left to right) Champ Carry, chairman, Pullman Inc.; D. W. Brosnan, president, Southern; W. Irving Osborne, Jr., president, Pullman Inc.; and J. W. Scallan, president, Pullman-Standard.

Interior sides and ends get one light roller coat of primer followed by a single light roller coat and five heavy coats of gray neoprene. The aluminum doors are not painted. The underside of the roof is finished with one light coat of primer followed by four coats of gray neoprene to obtain a 15-mil thickness. Final coat is aluminum colored neoprene. The steel floor is painted and sealed. Edges of the floor are filled with car cement.

The narrow-pedestal trucks have 3-and-11/16-inch-travel springs, 33-inch one-wear wrought-steel wheels, unit brake beams, and composition brake shoes. Axles are AAR-raised-wheel-seat design, smooth turned between wheel seats. Truck center plates are lubricated with molybdenum disulphide.

Inside length of the car is 50½ feet; length over strikers is 57 feet 8¼ inches. The inside width is 9 feet 4 inches; extreme width is 10 feet ⅜ inch. Inside height is 10½ feet; cubic capacity is 4,949 cubic feet. Over-all height of the car is 14 feet 8½ inches.

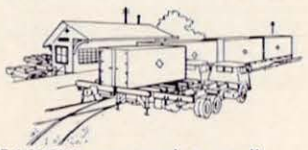
Versatile New Low-Investment
MOVES CONTAINER FROM RAIL CAR TO



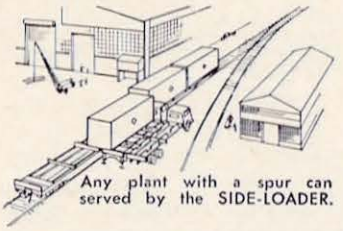
Unlike gantry cranes or over-size fork trucks, the DEMPSTER SIDE-LOADER is a highly mobile piece of equipment. It can work a string of stationary cars without tying up a train crew and it can stockpile containers on legs in a marshaling area for later handling by delivery units, clearing the empty cars for early departure. Its ability to move over the road at truck speeds makes it practical to send the SIDE-LOADER to points of many miles distance for unloading or transfer work. This flexibility of operation permits a shipper, a rail line or a freight forwarder to grow into the container system gradually on a "pay-as-you-grow" basis, greatly reducing the initial investment necessary to establish an effective system.

The truck-mounted SIDE-LOADER handles 20-ft. containers, the trailer model, 40-ft. containers. Both units go anywhere . . . work anywhere. They will work on uneven terrain and require only one man, the driver, who handles all transfer work from simple controls inside the cab. Transfer of container from rail car to delivery unit is accomplished in less than two minutes.

1:55 From Start To Finish!



SIDE-LOADER can travel to small towns for unloading operations.



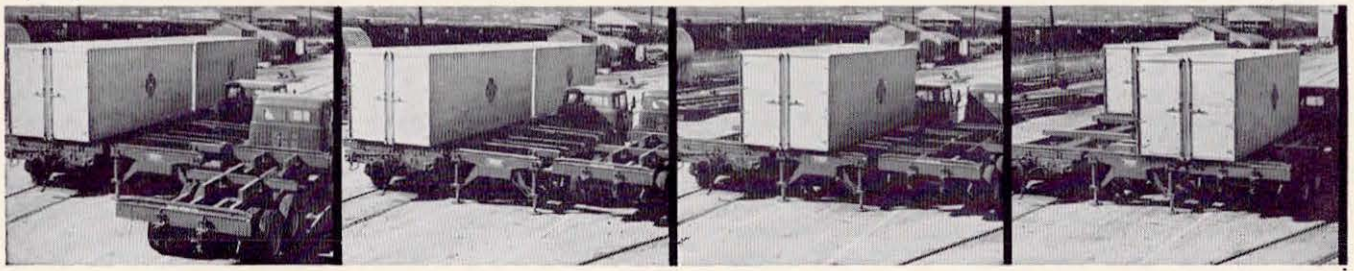
Any plant with a spur can be served by the SIDE-LOADER.

SIDE-LOADER and delivery unit pull up beside flatcar.

Bails engage hook.

Container is pulled half-way onto SIDE-LOADER.

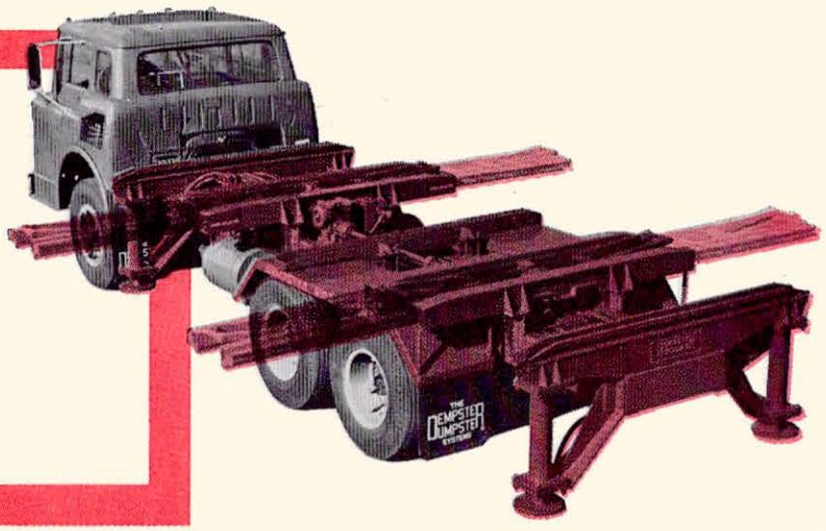
Pushing against the opposed bails, Container moves onto delivery unit.

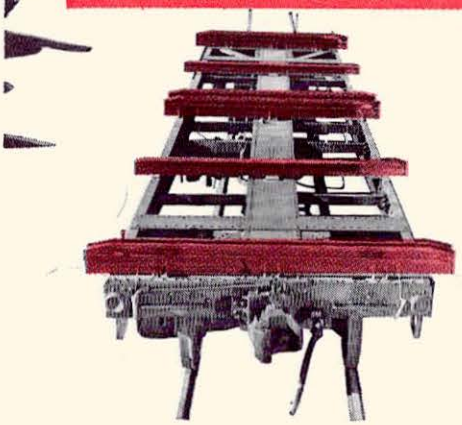


DEMPSTER SIDE-LOADER

DELIVERY UNIT IN LESS THAN 2 MINUTES

■ The DEMPSTER SIDE-LOADER is of extremely simple design with a minimum of moving parts. Two traveling bail platforms mounted in assembly guides are driven by a reversible hydraulic motor. These platforms with their spring-loaded bails engage hooks under the container and, through a combination of first pulling and then pushing against these hooks, can accomplish a 20-ft. lateral movement of the container from rail car to delivery unit, or the reverse.

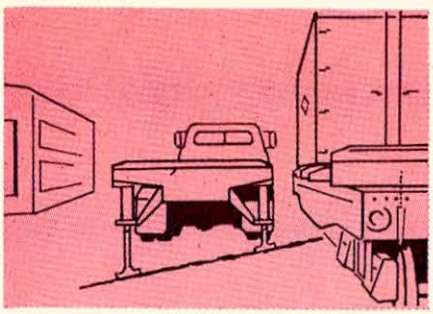




USE EXISTING CONTAINERS AND ROLLING STOCK/MINIMUM ALTERATIONS

■ Alteration of existing rolling stock for container service is accomplished by the simple mounting of four bolsters with container guides on a 45-ft. flatcar. Eighty-five ft. cars can be equipped for handling four 20-ft. containers or two 40-ft. containers by the addition of bolsters.

Existing containers can be modified for handling by the SIDE-LOADER system with a minimum outlay for hardware. Two sets of hooks are all that is necessary.



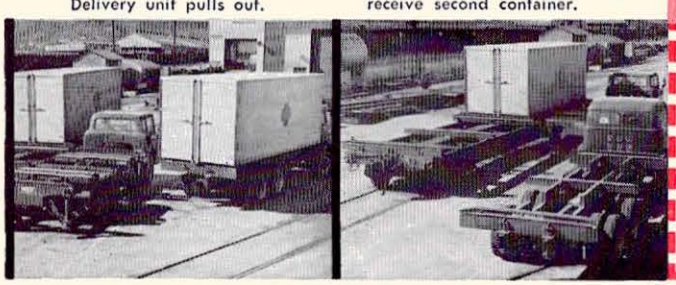
OPERATES ON UNEVEN TERRAIN

■ The hydraulic leveling jacks located at the four corners of the SIDE-LOADER Assembly are each independently operated to permit the SIDE-LOADER to operate on uneven terrain. During transfer operations these jacks support the entire load, eliminating the possibility of injury to the truck chassis.

DEMPSTER BROS.
Inc.
Dept. RA-5, Knoxville, Tenn.
California Branch / Compton

Delivery unit pulls out.

Second delivery unit moves up to receive second container.



Write Today!

An eight-page brochure detailing the operation of the DEMPSTER SIDE-LOADER has been prepared. Write today for your free copy.

TO: Dempster Brothers, Inc.
Knoxville, Tenn., Dept. RA-5
Please send brochure on new DEMPSTER SIDE-LOADER.

Name_____

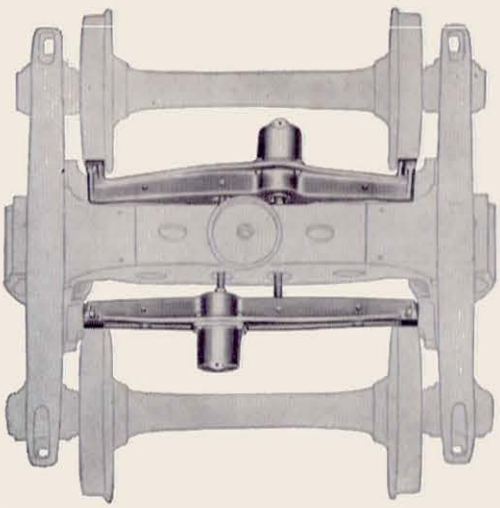
Firm_____

Title_____

Address_____

City_____ State _____

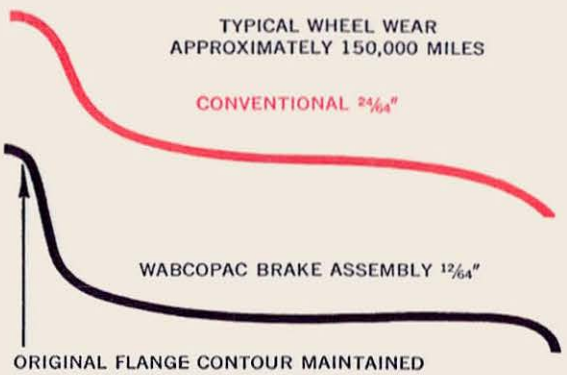
WABCOPAC® Brake Assembly



Simplicity of the WABCOPAC Brake Assembly—direct action of brake cylinders eliminates inefficient power transmission which occurs with conventional brake rigging. It delivers the maximum force to the COBRA* Composition Shoes in contact with the wheels. The WABCOPAC Brake Assembly eliminates the following conventional rigging components: body mounted cylinders, cylinder levers, slack adjuster, support brackets, rods, truck levers and beams.

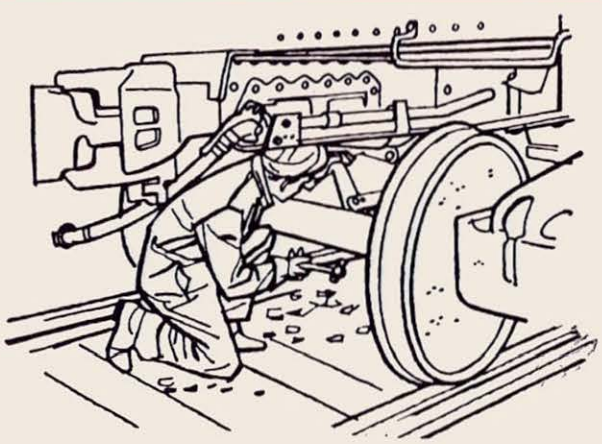
*Registered Trademark of Railroad Friction Products Corporation

Uniform shoe and wheel wear—direct acting brake cylinders of the WABCOPAC Brake Assembly provide uniform shoe force on all wheels. This produces even shoe and wheel wear with correspondingly longer wheel and shoe life. The wheel profiles below are typical and were taken from single-wear wheels after 150,000 miles of service. The lower profile is taken from a car equipped with WABCOPAC Brake Assembly and COBRA Shoes; note light tread wear and original flange contour maintained. The upper profile was taken from a car with cast iron shoes and conventional rigging. Wheel tread wear is doubled and a sharp vertical flange developed.



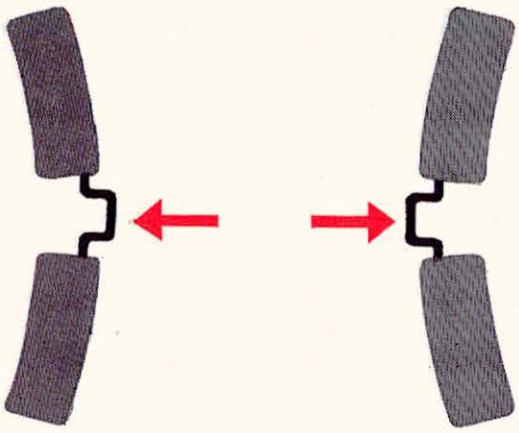
COMPARATIVE WEIGHTS	CONVENTIONAL RIGGING	WABCOPAC BRAKE ASSEMBLY
50 OR 70 TON BOX OR REEFER	1500 lbs.	1280 lbs.
70 TON PIGGYBACK	1900 lbs.	1310 lbs.
90 TON HOPPER	1950 lbs.	1320 lbs.
100 TON ORE E-L CLASP	3200 lbs.	1380 lbs.

Cuts dead weight up to 1800 lbs. per car. Replace conventional rigging with WABCOPAC Brake Assembly and convert the cost of hauling dead weight to increased payload. The WABCOPAC Brake Assembly can reduce dead weight 200 to 1800 pounds per car, depending on car design. This can be translated into savings of up to $90 per year.



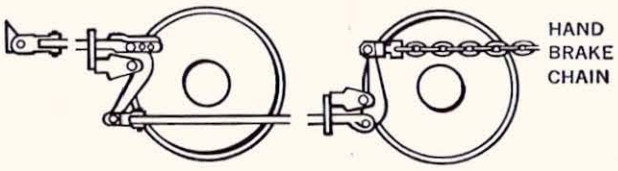
Elimination of the slack adjuster, either manual or automatic is a big step forward toward reduced maintenance. The WABCOPAC Brake Assembly needs no piston travel adjustment for the life of one-wear wheels. When multiple-wear wheels are used, piston travel adjustment is made only at the time of wheel turning.

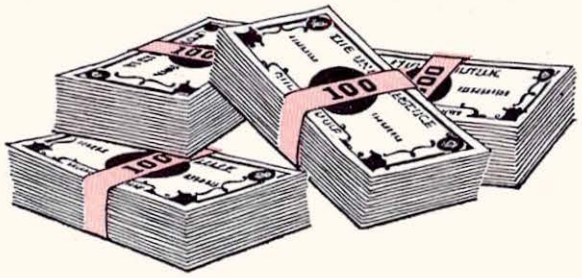
lowers transportation costs



The WABCOPAC Brake Assembly is more efficient than conventional brake rigging because of direct application of brake cylinder force to brake shoes. The WABCOPAC Brake Assembly is 80-85% efficient as compared to conventional rigging efficiency of 50-65%. The force delivered at the different shoe locations on a given car varies only 10% with WABCOPAC Brake Assembly, whereas this variation with conventional rigging is generally 40%.

The hand brake with WABCOPAC Brake Assembly is more effective for the important condition—the loaded car. Due to the characteristics of the COBRA Shoe, hand brakes are required on only one truck. By doubling the shoe force on one truck, better hand brake holding power is obtained over that now available with cars equipped with conventional rigging and metal shoes.





Savings on original installation

1. Low installation cost (Fewer brackets, levers, rods to fabricate & assemble)
2. No clasp brake required (Savings up to $400 per car)
3. No slack adjuster required
4. Single shoe per wheel

PLUS

Operating savings up to $145 per car per year

1. COBRA Shoes last from 2-4 times longer than metal shoes
2. Wheels will operate 50-100% longer
3. Estimated savings in dead weight haulage up to $90 per year

WABCO **WESTINGHOUSE AIR BRAKE DIVISION**
WILMERDING, PA. / Westinghouse Air Brake Company

LETTERS FROM READERS

A Conductor Speaks Out

Livingston, Mont.

To the Editor:

I have been reading Railway Age for over 30 years, and always with the hope that railroading would some day, through proper guidance, assume a more respected position with shippers and with the public in general, resulting in a profound respect to management by railway labor.

Railway labor, some day, must be convinced that management is working earnestly for the shippers and their own best interest, proven by deeds and not by lip service, editorials or newspaper writers of a controlled press.

Railway labor is always down at the customer's level and hears continuously of the customer's complaints, which sadly enough, are nearly always ignored. Because of this inside knowledge, the employees develop attitudes toward their work and employers, that are not to their own, their employers' or the public's best interest. This negative attitude is not unique to railroad labor alone. It also affects members of the official family who for various reasons don't understand policy decisions or haven't arrived at the policy making levels. Agents, traffic men, trainmasters, and division superintendents, all have suffered from this negative attitude caused by frustration of their own sincere, earnest and informed efforts to provide better service.

All this results eventually in this originally aggressive individual resigning himself to this "don't give a damn" attitude. The fact that railroads have been making profits with a majority of their employees harboring this "attitude" makes one wonder what kind of profits they could show with the wholehearted cooperation of all their employees.

Part of this attitude is called "featherbedding" by many including yourself, and some day this attitude must be overcome and I would believe you could become instrumental in helping hurry that day along. But, you must become more informed than you presently are. . . .

On your Action Page editorial of March 18, 1963, you say: "Back prior to World War I, a freight train crew could be called upon to jack up a journal box and change a bearing, right out on the mainline—while providing flag protection in one direction (and sometimes in both directions). If a drawbar was pulled out, the train crew was expected to chain the car behind the caboose and take it to the terminal. Nowadays, of course, train crews merely set out such defective cars."

Chaining a car behind the caboose, without a doubt today, could result in a minimum of one hour's delay to the train in addition to the delay caused by the removal of the car from any place in the train. Cooling and rebrassing a hot journal takes a minimum of 55 minutes and setting it out at an intermediate station somewhere in the vicinity of 30 minutes. Time is of essence in today's freight trains, and present crew consist is the very minimum necessary to pass signals in a safe manner. . . .

If you read your own statistics or articles on the hot box problem you would have known better than to have made this statement.

In the five years that lubricating pads were being installed to journal boxes, it is doubtful if there had ever been a more serious hot box problem on my railroad. One hundred hot boxes a month during the summer months was a "way of life" to crews in just one hundred-mile section of my railroad. . . . Many times trains had to be stopped by "pulling the air" from the caboose resulting in "pulled drawbars" because radios were not installed or the radio was malfunctioning.

In the past 60 days I have averted serious wrecks by detecting broken truck frames and lost spring packs on modern cars and neither of these defects could have been detected by any electronic equipment yet devised. . . . In February 1963 I handled eight consecutive "modern time" freight trains that had units of diesel power fail enroute and they required considerable maintenance by that "useless" employee you call a fireman. His help averted serious damage to millions of dollars of diesel power and avoided serious road delays to these important freight trains, and the only thing unusual about this is that the trips were consecutive.

A real objective job of reporting would seem to be a worthwhile project for your magazine, and many other self-styled experts who write for publication. . . .

W. R. McGee
Conductor
Northern Pacific

[In our March 18 editorial we referred to the many duties train crews were expected to perform 40-odd years ago which they do not perform today (such as shoveling coal and rebrassing hot boxes)—to explain the need for fewer men in a crew today. We did not and do not advocate requiring train crews to reassume all the odd-job duties they once performed.

It may be true, as Mr. McGee insists, that some employees and supervisors at times suffer "frustration." We can assure him that the temptation to feelings of inadequacy is not a discomfort suffered only at the level of train operation. Any conscientious employee—whether at the top of a company or in the ranks—is bound to be discontented with the quality of service, as long as it falls short of perfection. Instead of allowing himself to become discouraged, however, he should do his own part to improve it, as much as he can.

We believe the implications of the term "featherbedding" are often misunderstood. The working rules that result in waste of labor were not the product of malevolent design, but rather of the "freezing" of practices appropriate to the long-ago, requiring them to be observed in the present, when conditions are entirely different.

In a portion of Mr. McGee's interesting letter—which space limitations preclude our publishing in its entirety, he tells of hot boxes that he has rebrassed and defective equipment that he has detected—and we congratulate him on his interest and initiative. Most railroad employees are loyal railroaders—and our belief that working rules appropriate to 1918 are not appropriate to 1963 does not carry with it any doubts as to the zeal and interest of most employees.

Boiler-making as an occupation has almost disappeared on the railroads—a fact for which neither the employees nor management can be blamed. There are other railroad occupations that are similarly affected by changed circumstances (but not to the same degree). Adaptation to these changed circumstances is a simple necessity from which there is no escape if the railroads expect to stay in business—and protect essential jobs.

We endeavor to do an honest job of reporting, and regret that Mr. McGee (apparently) does not believe we are doing so. On our part, while we do not agree with much of Mr. McGee's letter, we do not question his sincerity nor his zeal as a professional railroader. The depth of his interest pervades his letter.—EDITOR]

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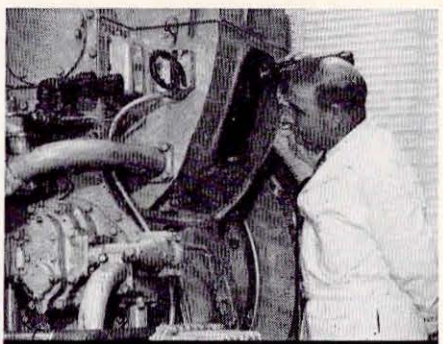

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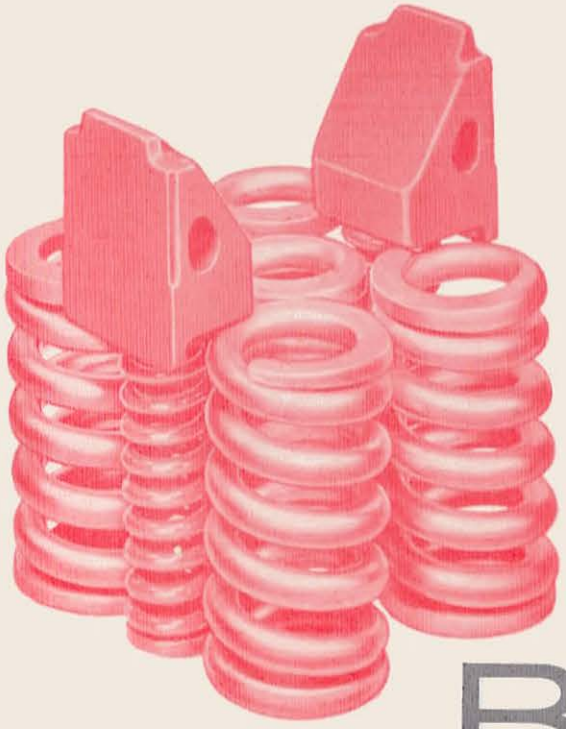

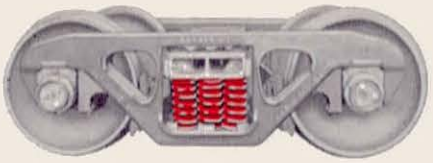

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1730

Real Estate Deals Raise RR Revenue

The current railroad use of land to increase income was called, at the Railway Development Association annual meeting, the 'most important thing' to come upon the industry in 20 years.

Palatial passenger stations are disappearing. With them goes an era in which railroad rights-of-way were reserved solely for trains and stations for passengers. Experts see, instead, office buildings, apartment projects, hotels, and arenas sprouting on railroad land as carriers strive to get maximum utility—and revenues—from their considerable real estate holdings.

Members of the American Railway Development Association at their annual meeting May 19-21 in Chicago heard about the greater sophistication and ingenuity being applied in the task of producing revenue from rail real estate—from spectacular air rights developments to the more mundane work being done with filling station leases and advertising signboard contracts. J. O. Boisi, vice president of real estate for the New York Central, called the use of railroad land "by far the most dramatic, most important thing that has come upon the industry in the past two decades."

ARDA members discussed land use in these areas:

- **Air Rights:** "There is a crying shortage of land" in urban areas, Mr. Boisi said, and "we in the railroad industry have the answer to this in the dual use of land."
- **Industrial Development.** Judicious disposal of land to generate traffic for the future was described as a vital phase of railroads' existence by Clair M. Roddewig, president of the Association of Western Railways. "The railroad that doesn't have land to locate industry," said Mr. Roddewig, "that's the railroad on the decline."
- **Surplus Lands.** The NYC has sold more than 500 stations for more than $9 million, Mr. Boisi said. Mergers will make the sale of abandoned rights of way and stations "of prime importance to the railroads," said F. D. Halter, assistant general land and tax attorney of the Erie-Lackawanna. Also, rights of way used for signboard advertising and filling stations adjacent to the right of way can produce important revenue for railroads, according to a panel of speakers.

"Dual utility of land is an absolute necessity," Mr. Boisi told the ARDA members, explaining that railroads can use their freight yards at ground levels with apartment houses or office buildings erected over them. He cited New York City's Park Avenue ("the street the Central built") as an example of the railroads' ability to make money from air rights. The property was "not earning much money for the railroad," he said. "It was decided to do something about this . . . to convert a residential boulevard into a prestige boulevard." The Pan Am, IT&T and Union Carbide buildings are among those buildings constructed in the project.

The value of air rights usually has been "based on the market value of the parcel as though it were a surface parcel and the air rights being 80% of that value," said E. E. Kinzel, general manager of real estate for the Pennsylvania (which has developed 21 acres of downtown Philadelphia (Penn Center) into a complex of commercial buildings and apartment houses through air rights).

- **Parking over rights of way.** Air rights could be leased for parking decks over railroad rights of way in urban areas, said Mr. Halter. "These air rights are a very profitable source of revenue since they bring a large return on investment, pay the taxes and still permit you to utilize the right of way for operating purposes."

Mr. Roddewig urged railroads to "forget the Elkins Act" in the sale of land to industries. The Act, he said was "not intended to take from the carriers the right to make normal business decisions" or "offer railroad officers an escape from making difficult decisions." Standardization of railroad policy in an effort to avoid indictment under the Act makes it difficult for the industrial development agent to operate effectively, he said, adding that the Act does not make it necessary to "put the property up, and, in effect, sell it at auction to the highest bidder." Railroad property can be sold to industries which will yield traffic, for less than the railroad paid for it, or for less than a bid with no traffic offers, he added, because the Act requires only that the sale price be fair "under all circumstances . . . what is a fair price to one may not be a fair price to another."

- **'Name it, we'll sell it.'** Some railroad land is being disposed of as surplus. Into that category fall the no-longer-needed passenger stations. "We have a set answer for anyone who says —'Do you have any passenger stations I can buy?'" said Mr. Kinzel. "The answer we on the Pennsylvania give—'You name it—we'll sell it.'"

Stations usually are replaced with less elaborate structures, more suited to the passenger flow. "We still operate in those cities (where stations were sold)," Mr. Boisi said, "and we didn't have to build new stations . . . I have not found it necessary to spend money for rent." Stations are sold to developers with the proviso that a modest replacement be erected among the new structures on the site or that part of a large building be reserved for passenger facilities. In Philadelphia, where a PRR commuter station was replaced by a high-rise apartment building, said Mr. Kinzel, "we reserved space in the new apartment building for a station. . . . The new space was considerably smaller than in the old station since we no longer needed a big ticket office, baggage room and other quarters formerly provided. For this we pay $1 per year" plus utilities. In other cases, the land is sold "but the station retained at a nominal or small rent and the balance of property was developed into garden-type apartments, supermarkets, office buildings etc."

Obstacles listed by Mr. Kinzel in converting passenger stations included:

- Opposition of civic organizations.
- Determining the best use for the property and zoning problems.
- Economic development of the station property while still providing necessary facilities for a commuter station and patron parking.

Land not suitable for commercial development, high-rise apartments or industries still can produce revenue, development agents agreed, through leases for filling stations, parking lots, or signboard advertising. In suburban areas, the lots are usually leased to an operator and the railroad gets about 60-70% of the revenue after overhead and operating expenses have been deducted. In small towns, the revenue is less, but by leasing to a municipality said Mr. Halter, "the area is properly policed, your taxes are paid, the lot is insured, and your patrons are not inclined to criticize the railroad for lack of free parking."

Railway Age Service Page

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

FIRST QUARTER OF CALENDAR YEAR 1963

Name of Road	Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1963	Total (inc. misc.) 1962	Operating Expenses: Maint. Way and Structures: Total 1963	Total 1962	Deprec. and Retirements	Maint. Equipment: Total 1963	Total 1962	Deprec. and Retirements	Traffic	Transportation	Total 1963	Total 1962	Operating ratio 1963	Operating ratio 1962	Net from railway operation	Railway tax accruals	Net Railway operating income 1963	Net Railway operating income 1962
Akron, Canton & Youngstown	3 mos.	171	1,436	....	1,467	1,586	129	144	17	259	230	40	115	513	1,145	1,167	78.0	73.6	322	137	54	113
Alabama, Tennessee & Northern	3 mos.	Became Class II road as of January 1, 1963																			
Atchison, Topeka & Santa Fe	3 mos.	12,993	122,443	8,075	144,693	144,302	17,987	17,449	2,405	31,526	33,149	8,073	4,574	54,424	116,475	116,230	80.5	80.5	28,218	14,132	13,376	7,941
Atlanta & St. Andrews Bay	3 mos.	81	599	....	621	984	71	139	10	79	90	24	21	194	429	557	69.1	56.6	192	84	26	110
Atlanta & West Point	3 mos.	93	645	57	828	888	103	105	25	159	138	42	57	369	754	739	91.0	83.2	75	48	—66	—3
Western Ry. of Alabama	3 mos.	133	832	54	986	1,024	110	126	32	192	173	53	66	416	853	856	86.5	83.6	133	71	28	18
Atlantic Coast Line	3 mos.	5,508	36,539	5,361	45,268	44,170	4,854	5,125	631	7,771	7,965	2,177	1,872	17,970	35,177	33,831	77.7	76.6	10,091	3,875	3,858	3,055
Baltimore & Ohio	3 mos.	5,866	74,911	2,709	83,756	87,570	8,427	9,099	1,509	14,370	17,719	2,446	2,353	37,136	67,131	72,465	80.1	82.8	16,635	6,318	1,832	—1,159
Staten Island Rapid Transit	3 mos.	29	420	313	750	862	133	164	50	86	100	4	6	458	766	807	102.1	93.6	—16	161	—239	—175
Bangor & Aroostook	3 mos.	567	3,841	53	4,037	3,883	928	904	64	883	903	327	72	1,339	3,420	3,275	85.4	84.3	587	260	397	314
Bessemer & Lake Erie	3 mos.	202	3,438	....	3,570	4,250	539	656	95	1,231	2,193	365	124	1,058	3,390	4,580	94.9	107.8	180	1,025	443	376
Boston & Maine	3 mos.	1,531	13,117	1,233	15,931	16,054	1,892	1,821	405	2,419	2,144	692	346	7,717	13,126	12,549	82.4	78.2	2,805	1,221	—333	385
CPR Lines in Maine	3 mos.	234	2,297	84	2,443	2,425	353	274	61	312	366	55	45	561	1,381	1,347	56.5	55.5	1,062	91	653	708
Carolina & Northwestern	3 mos.	284	827	....	854	834	106	101	23	99	99	63	15	228	487	489	57.0	58.7	368	78	134	116
Central of Georgia	3 mos.	1,744	9,991	378	10,931	11,133	1,838	1,954	146	1,995	1,989	615	530	4,474	9,448	9,741	86.4	87.5	1,482	794	445	453
Central RR of New Jersey	3 mos.	576	10,100	1,329	12,664	12,923	1,464	1,384	288	1,461	2,231	—437	211	6,741	10,520	11,022	83.0	85.3	2,153	1,420	—577	—651
Central Vermont	3 mos.	382	2,053	145	2,372	2,532	433	456	53	304	339	26	47	929	1,807	1,903	76.2	75.1	565	157	68	172
Chesapeake & Ohio	3 mos.	5,145	75,987	1,157	80,332	79,186	10,000	9,700	1,480	15,890	16,750	6,045	2,383	33,008	66,489	66,157	82.8	83.5	13,843	7,204	9,189	8,955
Chicago & Eastern Illinois	3 mos.	862	7,054	380	8,233	8,146	894	964	119	1,524	1,436	497	338	3,507	6,832	6,834	83.0	83.9	1,401	682	—73	167
Chicago & Illinois Midland	3 mos.	121	1,852	....	1,884	1,979	123	119	28	476	452	83	94	483	1,320	1,302	70.1	65.8	564	289	200	245
Chicago & North Western	3 mos.	10,474	43,599	4,237	50,519	51,473	7,572	7,839	1,253	9,200	9,655	3,403	1,822	21,912	43,508	45,383	86.1	88.2	7,011	4,171	—257	—2,275
Chicago, Burlington & Quincy	3 mos.	8,547	49,010	4,415	59,900	62,775	7,569	7,743	1,183	11,899	11,562	3,677	2,043	24,912	49,505	49,636	82.7	79.1	10,395	5,955	3,881	3,768
Chicago Great Western	3 mos.	1,459	7,419	14	7,883	7,652	1,009	867	135	1,350	1,268	385	364	2,841	5,843	5,707	74.1	74.6	2,041	587	572	324
Chic., Milw., St. Paul & Pacific	3 mos.	10,540	42,882	2,685	51,268	52,045	6,760	7,682	1,330	8,738	8,921	2,692	1,490	21,997	42,716	44,314	83.3	85.1	8,553	4,707	208	—71
Chicago, Rock Island & Pacific	3 mos.	7,842	39,435	3,536	47,907	50,443	5,767	5,949	795	8,357	8,785	2,016	1,556	20,571	39,080	40,084	81.6	79.5	8,827	3,940	1,215	1,778
Clinchfield	3 mos.	306	4,891	....	4,919	5,210	505	584	66	746	847	92	219	1,377	3,061	3,218	62.2	61.8	1,858	628	1,406	1,609
Colorado & Southern	3 mos.	712	2,997	145	3,591	3,702	438	543	53	714	770	258	85	1,521	2,989	3,147	83.2	85.0	602	272	322	212
Ft. Worth & Denver	3 mos.	1,037	4,023	262	4,951	5,450	794	737	121	675	702	132	195	2,402	4,427	4,622	89.4	84.8	524	Cr. 23	—141	—133
Colorado & Wyoming	3 mos.	39	531	....	776	1,311	51	58	6	91	99	39	4	345	526	612	67.8	45.7	250	168	81	270
Delaware & Hudson	3 mos.	763	9,829	316	10,366	10,838	1,124	999	213	2,256	2,244	558	313	3,985	8,442	8,361	81.4	77.1	1,924	1,193	714	732
Denver & Rio Grande Western	3 mos.	2,128	16,972	592	18,174	18,690	1,730	1,753	391	2,774	2,899	844	731	6,051	12,336	12,749	67.9	68.2	5,837	2,905	2,914	2,537
Detroit & Toledo Shore Line	3 mos.	51	1,400	....	1,734	1,937	181	239	11	219	293	79	63	580	1,097	1,250	63.3	64.5	637	230	189	140
Detroit, Toledo & Ironton	3 mos.	164	5,874	....	6,127	5,587	668	678	67	1,318	1,159	493	206	1,753	4,278	3,883	69.8	69.5	1,849	374	1,255	1,233
Duluth, Missabe & Iron Range	3 mos.	528	821	....	873	980	946	1,291	179	1,318	1,861	607	31	1,333	4,232	5,307	485.0	541.6	—3,359	286	—3,721	—4,782
Duluth, Winnipeg & Pacific	3 mos.	174	1,580	....	1,581	1,316	218	225	16	137	136	3	....	510	903	903	57.1	68.7	678	145	277	20
Elgin, Joliet & Eastern	3 mos.	295	8,163	....	10,939	12,636	930	915	97	1,963	2,935	228	146	4,252	8,232	10,004	75.1	79.2	2,727	1,723	863	383
Erie-Lackawanna	3 mos.	3,031	40,972	3,591	49,877	53,155	5,394	5,073	1,141	9,779	13,057	2,353	1,315	26,936	45,272	47,337	92.8	89.1	3,606	4,415	—5,138	—3,091
Florida East Coast	3 mos.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Georgia Railroad	3 mos.	321	1,643	39	1,918	1,917	249	251	21	365	333	109	139	857	1,711	1,685	87.8	86.6	237	121	40	106
Georgia & Florida	3 mos.	321	728	....	743	874	173	227	10	145	165	31	53	294	709	831	95.4	95.1	34	56	—121	—114
Grand Trunk Western	3 mos.	946	12,291	439	13,839	13,472	1,893	1,821	137	2,228	2,252	221	302	6,399	11,545	11,418	83.5	84.8	2,275	1,169	—380	—497
Great Northern	3 mos.	8,263	44,786	1,814	50,301	48,942	6,992	7,252	931	9,661	10,093	2,549	1,513	21,203	42,227	42,125	84.4	86.1	7,777	5,086	2,455	1,527
Green Bay & Western	3 mos.	219	1,004	....	1,034	1,025	78	116	15	169	130	27	82	323	716	754	69.2	73.5	318	137	75	48
Gulf, Mobile & Ohio	3 mos.	2,746	16,963	619	19,939	18,831	2,251	2,249	238	3,869	3,751	943	774	6,788	14,643	14,433	76.7	76.4	4,445	1,429	1,728	1,329
Illinois Central	3 mos.	6,460	53,263	5,387	65,887	65,216	8,432	8,462	1,210	12,137	12,293	2,947	1,899	26,818	52,670	52,162	79.9	80.0	13,217	5,527	4,677	3,228
Illinois Terminal	3 mos.	339	1,889	....	2,111	2,056	246	242	6	350	348	77	120	880	1,763	1,765	83.5	85.4	347	157	—51	—76
Kansas City Southern	3 mos.	894	9,694	230	11,016	11,261	773	635	150	1,423	1,402	417	295	3,510	6,362	6,270	57.8	55.7	4,654	1,712	2,001	1,803
Kansas, Oklahoma & Gulf	3 mos.	221	841	....	847	1,035	89	93	12	86	118	37	90	307	644	709	76.1	68.5	202	95	1	56
Lake Superior & Ishpeming	3 mos.	158	164	....	195	239	164	166	40	217	226	115	10	141	573	614	293.8	257.6	—378	115	—449	—480
Lehigh & Hudson River	3 mos.	98	935	....	995	895	111	90	8	124	117	25	54	370	704	656	70.8	73.3	291	118	46	28
Lehigh Valley	3 mos.	1,095	10,881	....	11,277	12,083	1,396	1,429	272	2,040	2,216	558	345	5,813	10,386	10,633	92.1	88.0	892	1,146	—903	—477

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

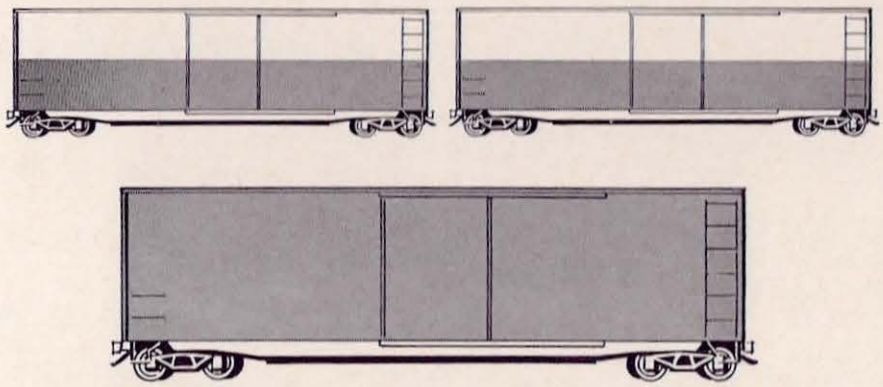
FIRST QUARTER OF CALENDAR YEAR 1963

Name of Road	Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1963	1962	Operating Expenses: Maint. Way and Structures: Total 1963	Total 1962	Deprec. and Retirements	Maint. Equipment: Total 1963	Total 1962	Deprec. and Retirements	Traffic	Transportation	Total 1963	Total 1962	Operating ratio 1963	1962	Net from railway operation	Railway tax accruals	Net Railway operating income 1963	1962
Long Island	3 mos.	340	2,440	14,922	17,918	17,421	2,306	2,283	290	3,781	3,388	501	142	9,436	16,543	15,825	92.3	90.8	1,375	958	—250	287
Louisiana & Arkansas	3 mos.	746	5,402	110	5,918	5,920	597	442	57	779	769	281	242	2,095	3,836	3,662	64.8	61.9	2,083	985	626	611
Louisville & Nashville	3 mos.	5,656	53,322	1,689	59,066	58,442	6,497	6,967	746	11,561	10,626	4,810	1,712	24,299	47,169	45,589	79.9	78.0	11,897	4,348	6,498	5,282
Maine Central	3 mos.	937	5,488	....	5,812	5,977	1,178	1,009	83	1,082	1,148	247	85	2,177	4,853	4,759	83.5	79.6	959	422	204	376
Minn., Northfield & Southern	3 mos.	77	839	....	879	805	61	73	8	117	117	40	105	241	610	624	69.4	77.6	269	169	95	45
Missouri-Illinois	3 mos.	324	1,097	....	1,104	1,243	106	126	7	301	260	162	43	367	859	856	77.8	68.9	245	178	314	176
M-K-T Lines	3 mos.	2,872	11,080	150	12,298	13,262	1,465	1,529	280	2,318	2,255	762	497	4,781	9,685	10,002	78.8	75.4	2,613	988	125	656
Missouri Pacific	3 mos.	9,301	62,550	1,920	71,421	72,446	9,318	9,434	943	12,388	12,880	3,345	1,825	26,502	53,318	54,133	74.7	74.7	18,102	3,944	9,014	7,332
Monon	3 mos.	541	4,053	72	4,390	4,590	477	509	63	770	797	227	310	1,711	3,589	3,834	81.8	83.5	801	285	238	85
Monongahela	3 mos.	174	983	....	992	1,254	180	295	33	136	145	33	3	334	689	818	69.5	65.2	303	65	—29	25
New York Central	3 mos.	9,974	112,821	13,574	147,257	157,191	17,870	16,603	3,226	26,917	30,851	6,891	2,752	73,779	129,409	133,570	87.9	85.0	17,857	12,822	—4,305	1,522
Pittsburgh & Lake Erie	3 mos.	216	5,530	55	5,949	7,638	1,028	1,076	189	2,448	3,639	863	222	2,454	6,724	8,421	113.0	110.3	—775	1,042	2,126	2,096
New York, Chicago & St. Louis	3 mos.	2,170	30,047	212	31,403	33,265	3,203	3,585	448	5,048	5,238	1,228	981	13,253	24,007	24,836	76.4	74.7	7,396	2,326	3,401	3,255
New York, New Haven & Hartford	3 mos.	1,673	15,566	10,455	30,351	31,498	3,945	4,201	813	5,481	6,221	1,138	628	15,787	28,200	29,611	92.9	94.0	2,151	2,161	—3,288	—3,849
New York Connecting	3 mos.	21	849	....	920	1,069	192	180	76	48	38	....	....	238	490	451	53.3	42.2	430	286	56	235
New York, Sus. & Western	3 mos.	71	778	12	843	943	142	121	20	91	127	15	27	374	721	773	85.6	82.0	121	78	—87	—37
Norfolk & Western	3 mos.	2,746	56,149	467	58,816	63,693	5,587	5,923	1,099	9,057	9,680	4,645	1,793	16,594	34,529	35,568	58.7	55.8	24,287	11,735	15,087	14,999
Norfolk Southern	3 mos.	593	2,049	....	2,083	2,190	391	429	56	402	360	119	150	731	1,868	1,949	89.7	89.0	215	149	—43	34
Northern Pacific	3 mos.	6,795	36,122	1,165	40,087	37,020	5,543	5,654	994	8,895	8,920	2,640	1,258	17,351	35,833	36,011	89.4	97.3	4,254	4,521	1,182	—1,377
Northwestern Pacific	3 mos.	328	2,651	1	2,656	2,655	501	505	52	172	94	7	21	778	1,544	1,449	58.1	54.6	1,113	404	164	215
Pacific Electric	3 mos.	318	3,410	....	3,862	3,787	454	515	63	128	116	11	62	1,739	2,659	2,681	68.8	70.8	1,203	638	—91	—173
Pennsylvania	3 mos.	9,765	148,868	24,170	198,236	214,222	20,101	20,243	4,489	37,681	41,786	8,621	3,141	94,493	167,579	173,914	84.5	81.2	30,657	15,037	—2,455	4,675
Penn.-Reading Seashore Lines	3 mos.	341	1,424	91	1,611	1,718	457	478	71	349	302	75	11	1,307	2,262	2,265	140.4	131.8	—650	201	—1,264	—1,214
Piedmont & Northern	3 mos.	126	1,335	....	1,376	1,466	133	136	15	114	111	29	114	309	796	774	57.9	52.8	579	296	126	117
Pittsburgh & West Virginia	3 mos.	132	1,447	....	1,457	1,789	293	322	76	289	366	116	131	516	1,377	1,538	94.5	86.0	80	117	—120	112
Quanah, Acme & Pacific	3 mos.	120	745	....	751	779	43	47	5	43	46	1	32	153	299	320	39.8	41.1	453	112	220	178
Reading	3 mos.	1,286	21,293	1,555	24,750	26,444	3,367	3,580	572	4,601	4,795	1,225	526	11,680	21,610	21,962	87.3	83.1	3,139	1,944	—258	1,482
Richmond, Fredericksburg & Pot.	3 mos.	118	3,936	1,291	6,275	6,449	500	483	96	892	985	203	91	2,206	4,182	4,283	66.7	66.4	2,092	1,025	760	541
Rutland	3 mos.	391	32	....	54	19	59	43	25	81	80	25	4	29	229	202	.	.	—175	37	—130	—183
St. Louis-San Francisco	3 mos.	4,544	26,631	417	29,115	29,812	3,659	3,685	607	4,592	5,015	1,737	1,124	11,331	22,585	23,406	77.6	81.0	6,530	2,388	3,091	2,519
St. Louis, San Fran. & Texas	3 mos.	143	1,124	....	1,167	1,291	81	151	13	67	69	4	71	481	736	814	63.0	63.0	432	111	92	99
St. Louis Southwestern	3 mos.	1,554	18,847	....	19,057	18,365	1,579	1,615	223	2,267	2,149	894	548	5,832	10,857	10,597	57.0	57.7	8,200	3,444	3,699	3,238
San Diego & Arizona Eastern	3 mos.	136	746	....	765	748	80	80	14	16	23	1	....	164	289	315	37.8	42.1	476	240	144	129
Savannah & Atlanta	3 mos.	168	1,140	....	1,174	1,223	170	195	6	198	201	70	53	385	846	848	72.1	69.3	328	68	217	109
Seaboard Air Line	3 mos.	4,123	37,008	3,935	44,710	42,684	6,138	5,898	718	7,754	7,685	2,266	5,183	16,282	33,832	32,269	75.7	75.6	10,878	4,691	4,481	3,744
Soo Line	3 mos.	4,673	16,892	86	17,888	16,495	2,444	2,331	316	3,327	3,191	812	673	7,725	15,123	14,983	84.5	90.9	2,765	1,163	538	—768
Southern Railway	3 mos.	6,274	57,980	2,282	65,255	67,017	8,000	8,244	1,165	12,366	12,249	3,579	1,749	21,545	6,407	6,083	72.9	70.1	17,679	6,735	8,797	8,735
Alabama Great Southern	3 mos.	327	3,426	125	3,991	3,876	556	691	109	900	930	251	149	1,438	3,361	3,499	84.2	90.3	630	235	204	10
Cinn., New Orleans & Tex. Pac.	3 mos.	337	7,579	186	8,514	8,827	1,184	1,415	208	2,359	2,436	843	275	2,706	7,120	7,367	83.6	83.5	1,395	759	988	1,207
Georgia Southern & Florida	3 mos.	397	1,537	84	1,899	2,101	406	435	38	225	241	31	60	755	1,604	1,643	84.4	78.2	295	112	—239	—99
New Orleans & Northeastern	3 mos.	203	2,499	99	2,804	2,785	515	602	78	750	726	322	91	863	2,465	2,431	87.9	87.3	339	239	95	196
Southern Pacific	3 mos.	11,782	147,399	5,403	162,657	164,516	18,861	19,272	1,982	34,421	33,388	10,523	3,006	61,971	125,589	126,187	77.2	76.7	36,078	16,993	15,747	13,389
Spokane International	3 mos.	150	692	....	723	769	131	139	16	47	62	27	10	186	407	464	56.2	60.3	317	131	148	130
Spokane, Portland & Seattle	3 mos.	936	7,267	211	8,006	7,255	1,251	1,162	163	1,354	1,309	387	112	3,150	6,110	6,044	76.3	83.3	1,896	670	817	233
Tennessee Central	3 mos.	280	862	....	912	996	150	124	16	162	169	64	45	361	778	764	85.3	76.6	134	77	—73	21
Texas & Pacific	3 mos.	1,821	15,730	615	18,089	18,095	2,045	1,737	287	2,722	2,819	896	679	6,891	13,365	13,543	73.9	74.8	4,724	1,525	1,695	1,327
Texas Mexican	3 mos.	161	583	....	670	689	124	139	19	86	93	39	40	207	527	556	78.7	89.7	143	84	3	3
Toledo, Peoria & Western	3 mos.	239	1,748	....	1,838	1,714	168	174	19	154	143	35	153	568	1,163	1,137	63.2	66.3	676	287	168	133
Union Pacific	3 mos.	9,705	107,099	4,837	121,225	118,919	13,977	14,033	1,789	23,898	22,759	8,566	3,543	43,354	91,439	89,212	75.4	75.0	29,786	16,711	8,779	8,825
Wabash	3 mos.	2,423	26,741	729	30,286	29,577	2,475	2,370	396	4,067	3,959	1,496	1,007	13,720	22,857	22,344	75.5	75.5	7,429	1,947	2,274	2,199
Ann Arbor	3 mos.	294	1,629	....	1,641	1,825	141	156	20	421	357	126	59	931	1,614	1,563	98.4	85.6	27	141	—173	60
Western Maryland	3 mos.	852	10,148	....	10,560	11,854	1,385	1,674	221	2,574	2,701	929	358	3,915	8,869	9,336	84.0	78.8	1,691	960	1,428	1,874
Western Pacific	3 mos.	1,184	13,858	428	14,587	13,334	1,642	1,517	277	2,141	2,085	642	748	4,898	10,410	9,902	71.4	74.3	4,176	1,968	1,890	1,354

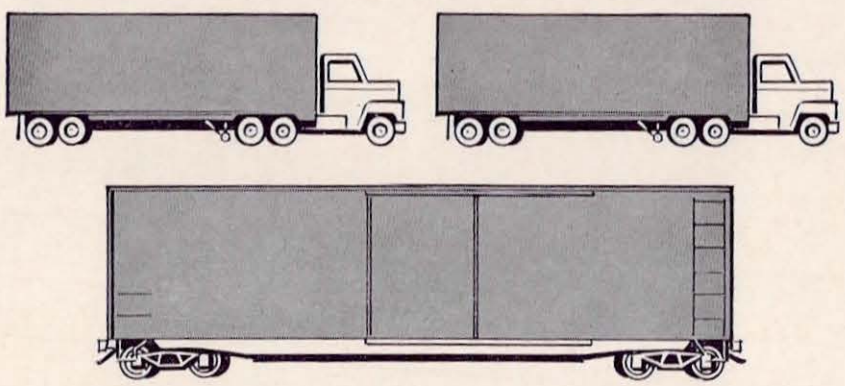
Railway Age Service Page

REVENUES AND EXPENSES OF RAILWAYS

SAVINGS BY THE CARLOAD...



Reduce unit costs by combining less than capacity shipments, or... by shipping in one boxcar instead of two trucks.



SHIP BIG SAVE BIG

Another way

FRISCO-OPERATION

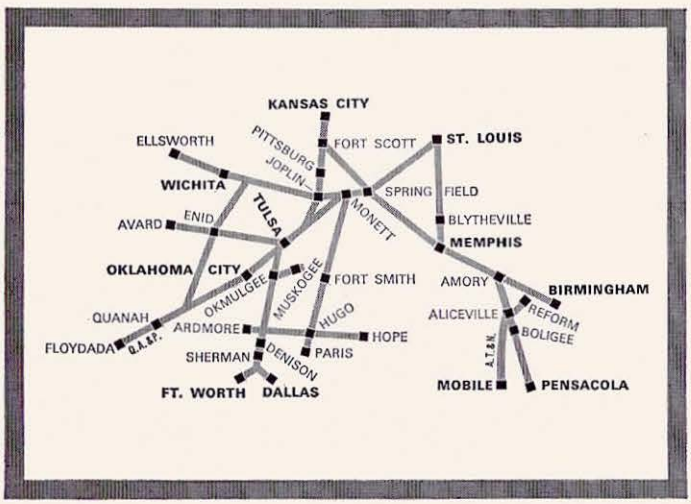
works for you!

Looking for ways to cut costs? Then don't overlook the economies offered by *planned mass transportation.*

Larger shipments may enable you to qualify for a Frisco Incentive Rate. The lower rate on the weight in excess of the carload minimum can result in substantial savings—$55.30 on a single car in the case of an Arkansas shipper!

How can this concept benefit you? Frisco has the equipment and facilities to help you make the most of advantages inherent in SHIPPING BIG. Equally important, Frisco offers the know-how and resourcefulness necessary to work out a *practical* mass transportation plan for you.

Make the Frisco your Working Partner in reducing shipping costs. Talk over your shipping procedures with your Frisco Man (sales offices in 63 strategically located cities). He's experienced and qualified to understand your shipping problems and suggest a shipping service tailored to your needs. And he is backed by a railroad where *unusual* service to shippers is an almost daily occurrence. See FRISCO-OPERATION *in action!*



Main Line to, from and thru the Southeast-Southwest —via 143 interchange points with 62 railroads.

FRISCO

5,000 Miles Serving: MISSOURI • KANSAS • ARKANSAS • OKLAHOMA • TEXAS • TENNESSEE • MISSISSIPPI • ALABAMA • FLORIDA

THIS COMBINATION MAKES THE BIG DIFFERENCE IN CAR CUSHIONING

More railroads have installed *more* Hydra-Cushion Underframes on freight cars than any other modern cushioning device . . . over 10,000 cars! 32 carriers! And the list grows daily. Longer years of usage have proved it the most dependable device available with the longest life expectancy.

- Only Hydra-Cushion equipment combines low-pressure hydraulics with multiple friction plates; making possible maximum cushioning without excessive sill travel. The Hydra-Cushion design eliminates curvature problems, coupling difficulties, and unnecessary overhang.
- Only Hydra-Cushion equipment uses hydraulic fluid in an upright, *not a horizontal* cylinder. Its simple, *not complex*, sealing system means safer, more dependable operation, with far less maintenance!
- Only Hydra-Cushion equipment operates with a fraction of the hydraulic pressure of other devices . . . another reason why Hydra-Cushion equipment is less costly to maintain.

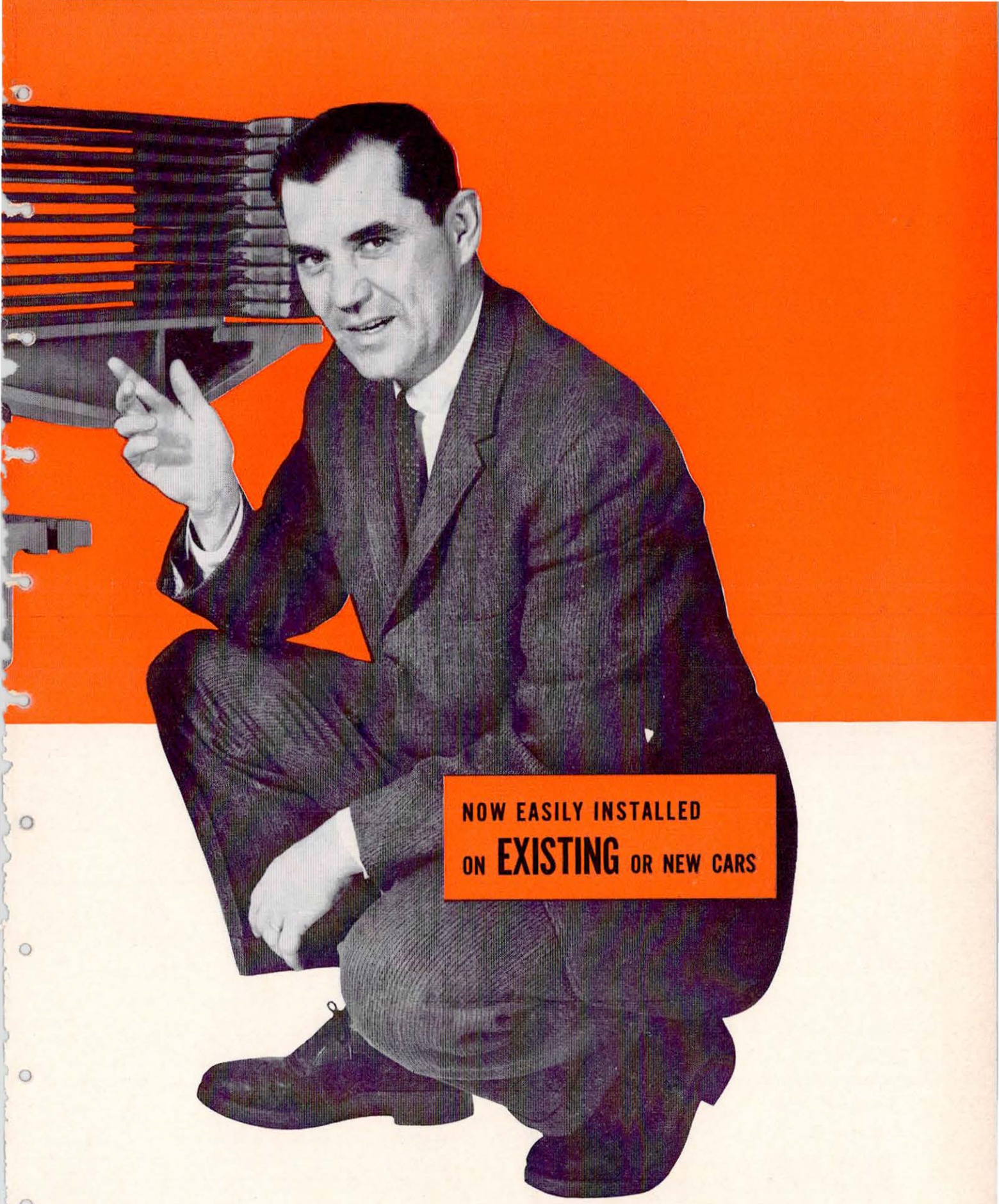
Extensive research, greater experience in impact cushioning, plus a large staff of field and design engineers, makes Hydra-Cushion equipment the sales leader in the hydraulic cushioning field. There *is* a big difference in car cushioning! May we tell you more? Write Hydra-Cushion Inc., 332 So. Michigan Ave., Chicago 4, Illinois or 13101 Eckles Road, Plymouth, Michigan.

THE BIG DIFFERENCE IS THIS . . .

Other modern cushioning devices rely on high-pressure hydraulics. The unique Hydra-Cushion system combines a low-pressure hydraulic unit (A) with a set of fixed (B) and movable (C) friction plates. Upon impact, the moving sill actuates the hydraulic unit which, in turn, exerts increasing pressure upon the friction plates to achieve powerful braking action. The impact force is so reduced that damage-causing shock is eliminated. There is no jolt of recoil. Springs within the sill return it gently to normal position.

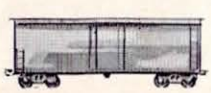
HYDRA-CUSHION®
UNDERFRAME

32 LEADING CARRIERS ARE NOW ON THE GROWING LIST OF HYDRA-CUSHION USERS • American Refrigerator Transit Co. • Atlantic Coast Line • Bangor & Aroostook Chesapeake & Ohio • Chicago, Burlington & Quincy • Chicago, Milwaukee, St. Paul & Pacific • Chicago & Northwestern • DRGW • Erie Lackawanna • Evans Products Company • Fruit Growers Express Great Northern • Gulf, Mobile & Ohio • Linde Air Products • Louisville & Nashville • Missouri Illinois • Missouri Pacific • New York Central • NITX • North American Car • Northern Pacific Pacific Fruit Express • Pennsylvania • St. Louis-San Francisco • St. Louis Southwestern • Seaboard Air Line • Soo Line • Southern Pacific • Texas & Pacific • U. S. Navy • Wabash • Western Pacific

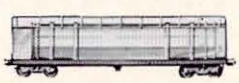


NOW EASILY INSTALLED
ON **EXISTING** OR NEW CARS

Hydra-Cushion equipment is proving its superior performance on all types of cars.



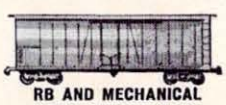
BOX CAR



TANK CAR

FLAT CAR

TRI-LEVEL CAR



RB AND MECHANICAL
REFRIGERATED CARS

efficiency machine

This Stromberg-Carlson telephone symbolizes that efficient communication is basic to the solution of business problems. It also represents *systems planning capability in depth*—and a complete line of communications equipment—both available from Stromberg-Carlson.

Systems planning capability and superior equipment are demonstrated in thousands of Stromberg-Carlson installations. They include: XY® dial switching systems; four-wire data and telephone switching systems; voice and telegraph carrier; transmission systems for open-wire or radio-link applications; D. C. pulse or frequency dialing PBX systems; telephones for every standard or specialized use.

Our team of communication specialists is ready to work with you in planning the most effective approach to your communication needs. Call or write Industrial Sales Department, 128 Carlson Road, Rochester 3, N. Y. (716) HU 2-2200.

STROMBERG-CARLSON
A DIVISION OF **GENERAL DYNAMICS**

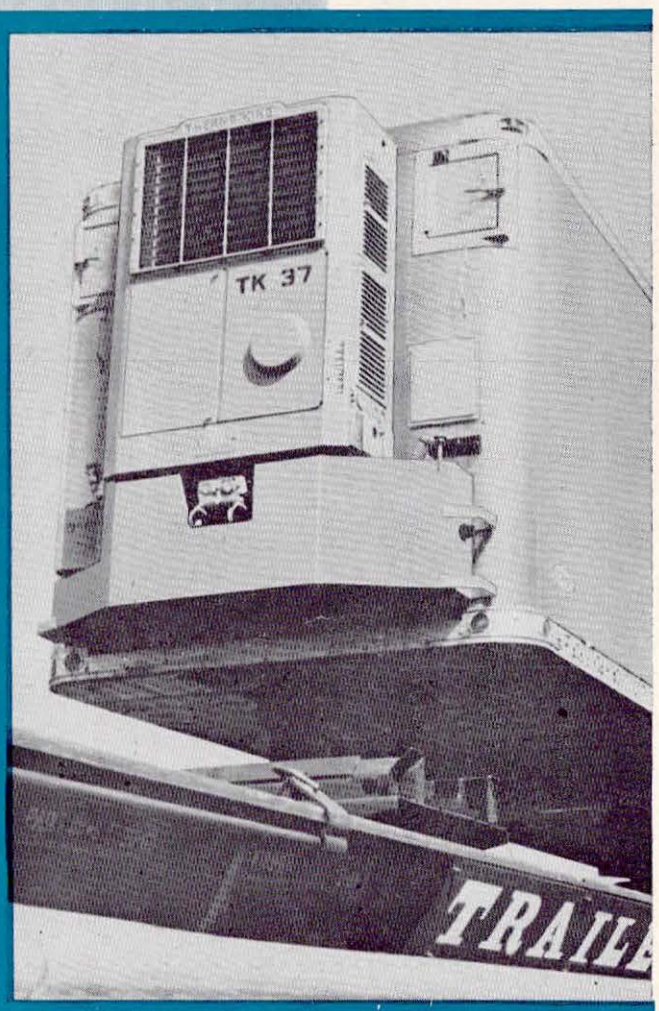
Piggybacking Perishables?

These leading railroads protect piggyback cargoes with dependable, proven

THERMO KING

REFRIGERATION UNITS

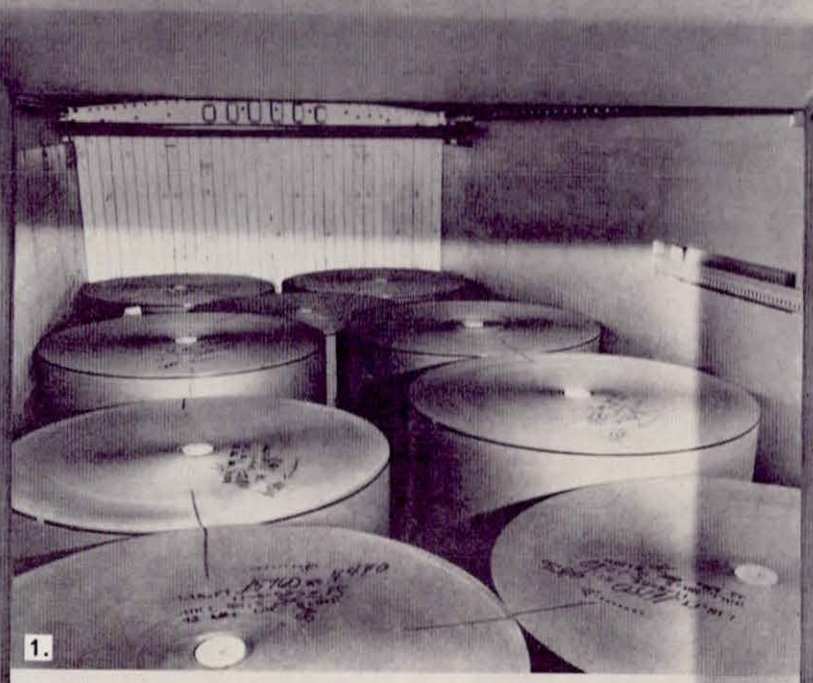
ALASKA RAILROAD
ATLANTIC COAST LINE
BALTIMORE & OHIO
BOSTON & MAINE
BURLINGTON
CHICAGO & NORTHWESTERN
ERIE LACKAWANNA
FRISCO
FRUIT GROWERS EXPRESS
GREAT NORTHERN
ILLINOIS CENTRAL
KANSAS CITY SOUTHERN
LOUISVILLE & NASHVILLE
MILWAUKEE ROAD
MISSOURI-KANSAS-TEXAS
MISSOURI PACIFIC
NEW YORK CENTRAL
NICKEL PLATE
NORTHERN PACIFIC
PACIFIC FRUIT EXPRESS
PENNSYLVANIA
SANTA FE
SEABOARD AIR LINE
SOUTHERN
SOUTHERN PACIFIC
UNION PACIFIC
UNITED STATES FREIGHT
WESTERN PACIFIC



THERMO KING pioneered the refrigeration of piggyback trailers . . . meeting rigid standards of dependability and performance in every way . . . helped railroads develop this vast new marketing system. It's simply good business to protect perishable cargoes with reliable THERMO KING temperature control equipment.

THERMO KING CORPORATION
World Leader in Transport Refrigeration
350-E W. 90th St., Minneapolis 20, Minn.

CCA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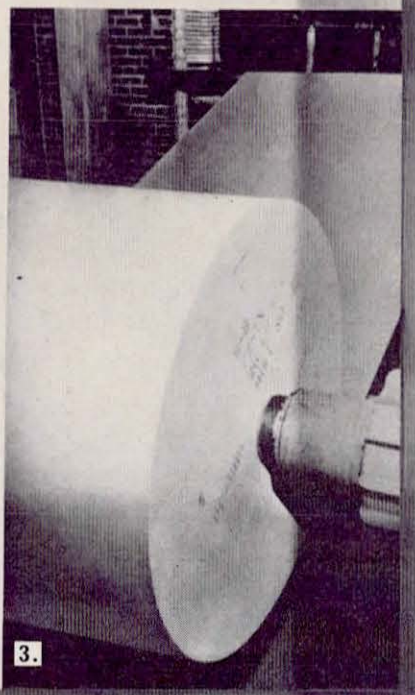
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RAILROAD CUSTOMERS WILL READ

this thought-provoking message in top traffic publications. They'll discover another step forward in shipper service being provided by America's railroads.

1. Marks match on roll ends. As a check on spinning, rolls were marked after loading. On arrival match-up remained perfect!

2. No scuffing, no spinning. Mr. S. H. Tippett confirms lack of roll shift by comparing floor and roll top crayon marks upon load arrival at Philadelphia.

3. Production line ready. Paperboard arrived ready for high speed production equipment. No torn layers, scuffed ends or flattened rolls, thanks to P-S Hydroframe-60.

Faster unloading. Hydroframe-60 cars, like SAL 15005, deliver CCA paperboard rolls without damage or delay.

NO DAMAGE IN P-S HYDROFRAME-60®

TEST SHIPMENT OF HEAVY PAPERBOARD ROLLS

Making containers for almost every conceivable use takes a huge amount of corrugated board, which requires a constant supply of high-quality paperboard for its outer layers.

Shipping paperboard rolls formerly presented problems . . . they're heavy, hard-to-handle and damage-susceptible. An overspeed car impact can cause roll-sliding, with scuffing action that damages roll ends. Roll rotation, or spinning, tears outer layers, causing loss and production slow down. Badly flattened rolls are a total loss—won't work on the corrugator. All these things can happen to paperboard shipments, but not with those received in P-S Hydroframe-60* Box Cars at the Philadelphia plant of Container Corporation of America.

These photos show a Hydroframe-60 shipment from CCA's Fernandina Beach, Florida, mill to its Philadelphia plant. There were 22 rolls in this big Seaboard Hydroframe-60 car. Some individual rolls weighed nearly 2½ tons and contained over three miles of paperboard in a continuous sheet. Total load weight was 94,562 lbs. Four roads handled the carload in its 874 mile trip.

Condition on arrival—Perfect! No spinning, scuffing or longitudinal roll movement. Crayon marks made on the car floor at the Fernandina Mill showed two rolls in a 10-inch void area at the doorway had moved just two inches. Hydroframe-60 test shipments are proving so successful that CCA expects to reduce dunnage requirements through the use of these cars.

Mr. S. H. Tippett, CCA's Eastern Division Traffic Manager stated, "Whenever we can get them, we use Hydroframe-60 cars for our paperboard shipments. We can load these cars heavier and still get no damage . . . saves time, money and warehouse space."

Shippers and receivers of damage-susceptible commodities of all types are discovering the important benefits of Hydroframe-60 thirty-inch cushioning. For your next hard-to-handle shipment, try a Hydroframe-60 Box Car.

*Covered by U. S. Patent 3,003,436. Other Patents Pending.

These shipper-conscious carriers have Hydroframe-60 equipment in service or on order.

Atlanta & West Point	Milwaukee Road
Atlantic Coast Line	Missouri-Kansas-Texas
Bangor & Aroostook	Norfolk & Western
Chesapeake & Ohio	Richmond, Fredericksburg & Potomac
Clinchfield	Rock Island
Detroit, Toledo & Ironton	Seaboard
Gulf, Mobile & Ohio	Southern
Kansas City Southern	Texas & Pacific
Louisville & Nashville	

PULLMAN-STANDARD

A DIVISION OF PULLMAN INCORPORATED • 200 SOUTH MICHIGAN AVENUE • CHICAGO 4, ILLINOIS

BIRMINGHAM • PITTSBURGH • NEW YORK • SAN FRANCISCO • J. C. FENNELLY CO., REPRESENTATIVE

Nothing is left "unturned" in our constant modernization program to benefit shippers!

Car-positioner at Milwaukee Shops turning freight car for faster, better welding.
The Milwaukee Road Shops are among the most extensive and well equipped in railroading.

THE MILWAUKEE ROAD

America's resourceful railroad

THERE'S REAL INGENUITY IN THE EQUIPMENT IMPROVEMENT PLANS SET UP BY OUR

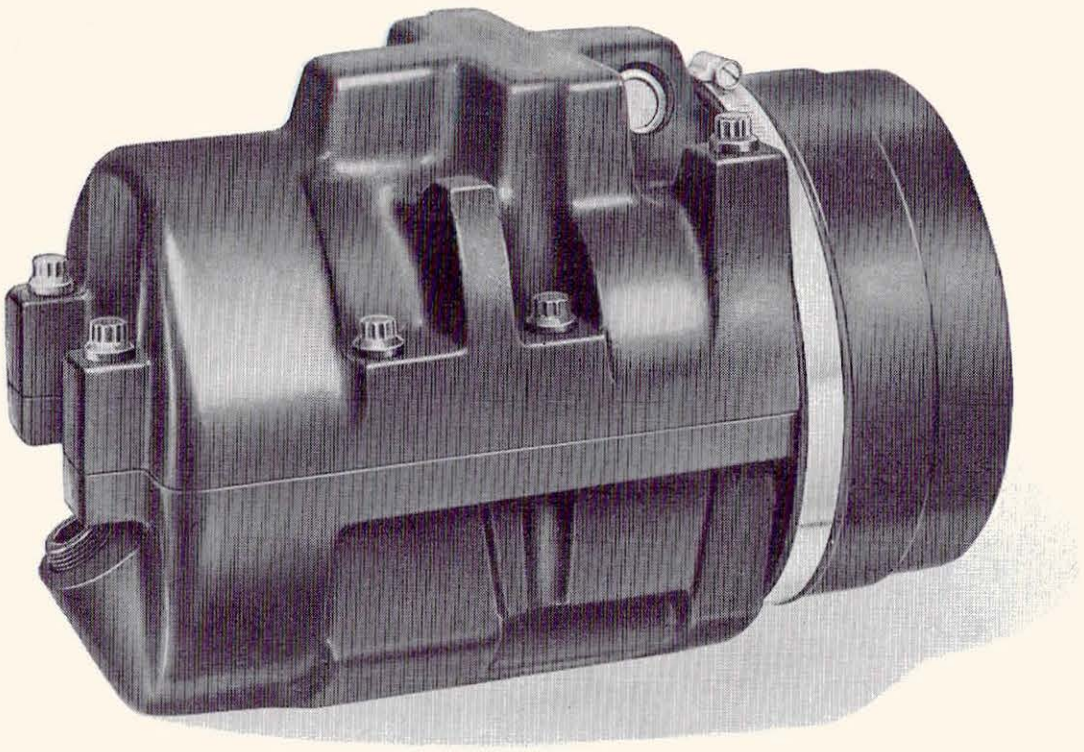
CREATIVE CREWS

Today's shipping needs are different from yesterday's. So much different in fact that the Milwaukee Road has organized one of its famous *Creative Crews* to meet the problem.

Known as the Freight Car Committee, it is composed of representatives from every major department of the railroad. It meets regularly to analyze our shippers' needs and decide what equipment should be purchased or rebuilt to meet requirements.

This year, about 5 million dollars is being spent to rebuild and re-equip over 3,000 box cars at the famous Milwaukee Road Shops in Milwaukee. In addition, scores of gondola, refrigerator and other types of cars are being rebuilt, repaired or equipped with loading devices.

The railroad's 1963 improvement program includes everything from the purchase of new, insulated, damage-free box cars and covered hopper cars to new, turbo-charged diesel locomotives. It's all further reason why shippers know the Milwaukee Road as America's *resourceful* railroad...doing better what the railroads do best. *The Milwaukee Road Union Station Bldg., Chicago 6, Illinois.*



This CLEVITE cartridge journal bearing takes the heaviest loads and impacts easily and dependably. Recent increases in freight car capacities are handled with no reduction in bearing life. Write:

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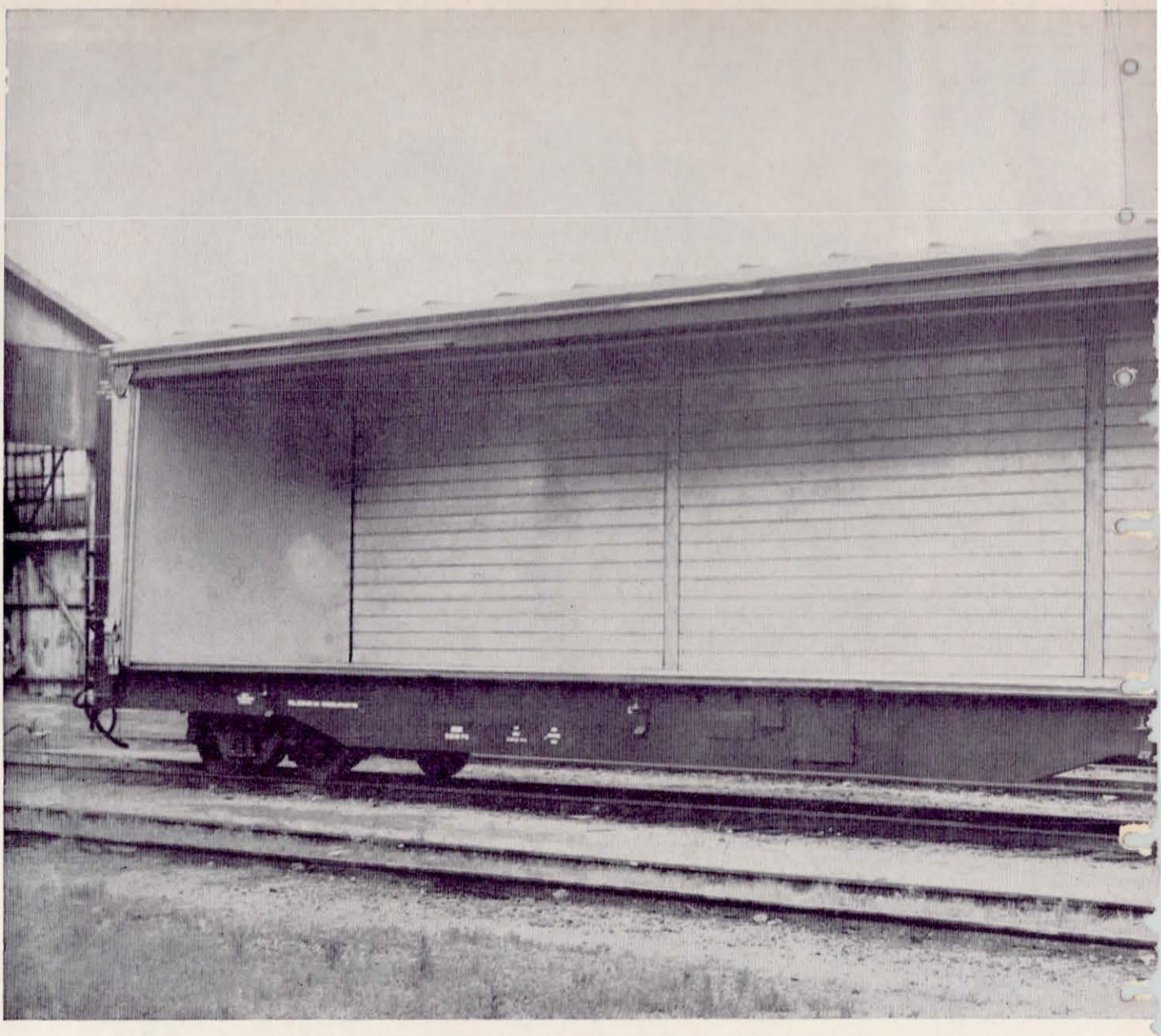
DIVISION OF CLEVITE CORPORATION, 17000 ST. CLAIR AVE., CLEVELAND 10, OHIO. IN CANADA: CLEVITE LTD., 1177 TALBOT, ST. THOMAS, ONTARIO



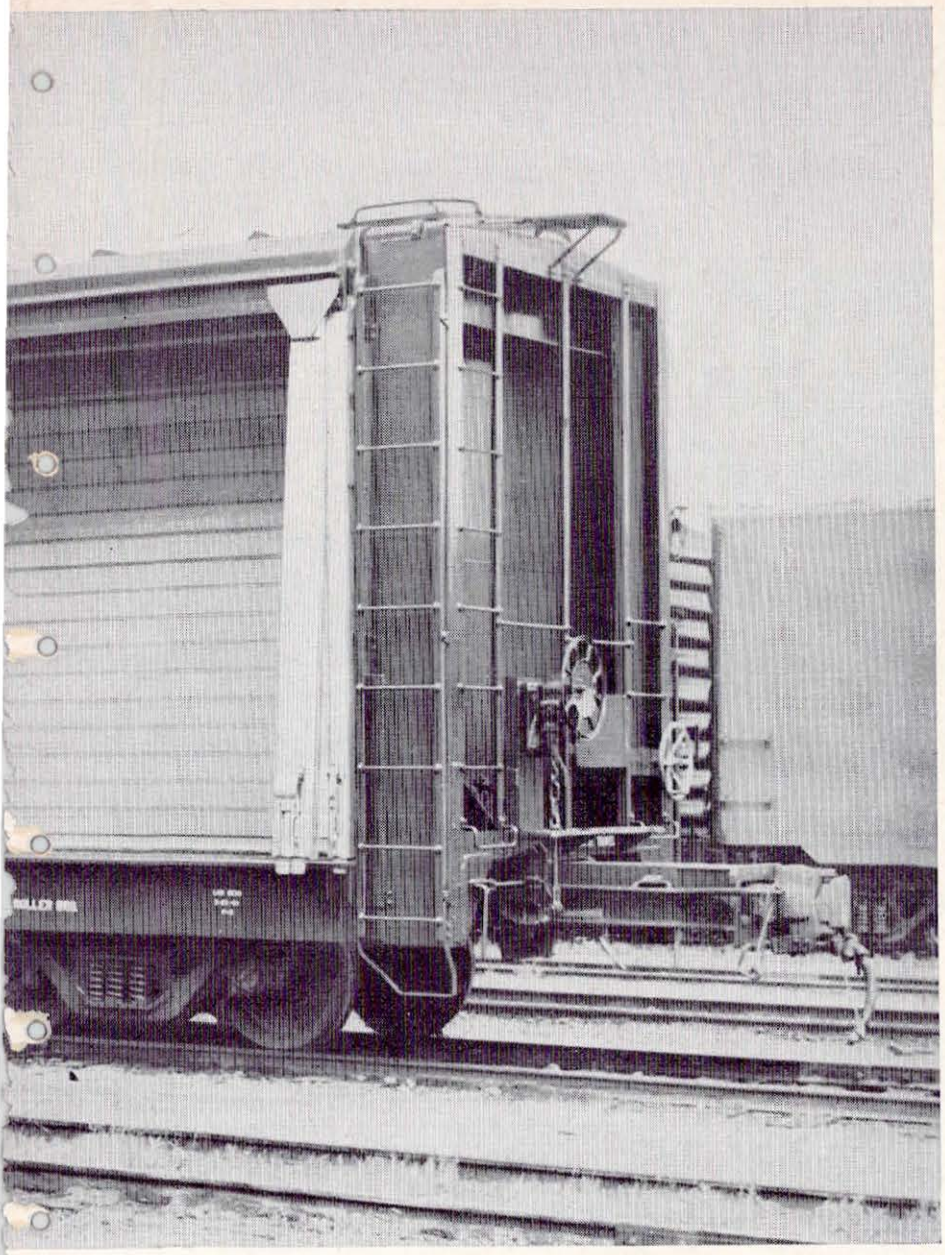
What makes Southern's new

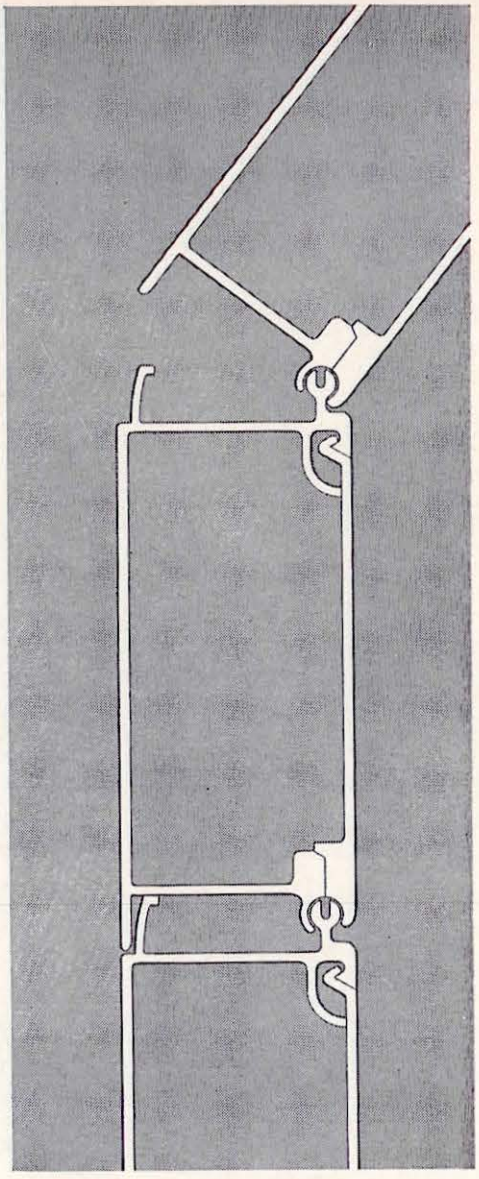
REYNOLDS ALUMINUM

Southern Railway's new All-Door Box Car offers shippers faster, easier loading of really big freight. It loads as easily as a flat car, and protects cargo with enclosed shipping. Doors are being built by Barber-Colman; Pullman-Standard is building the cars.

Rugged, lightweight doors—the full car length—roll up to open the whole side of the car for loading and unloading. Any cargo package up to 50 ft. 6 in. long and 9 ft. 3 in. high can be put right into the car through this side opening.

The secret, of course, is in the door. And the secret of the car-wide door is in its construction—using Reynolds Aluminum Extrusions. The extrusions, with their ball-and-socket joints, form





Cross-section of Reynolds Aluminum Extrusions that give new roll-up box car doors their lightweight strength.

car-wide doors work:

EXTRUSIONS (they make doors strong, too)

three strong door section panels which roll up under the car roof—just as an overhead garage door does.

The door sections are light in weight, movable by one man. Yet, their hollow wall extrusion design provides the strength and rigidity that daily freight service demands. And, being aluminum, the doors will never need painting or protection from corrosion; they won't rust—ever.

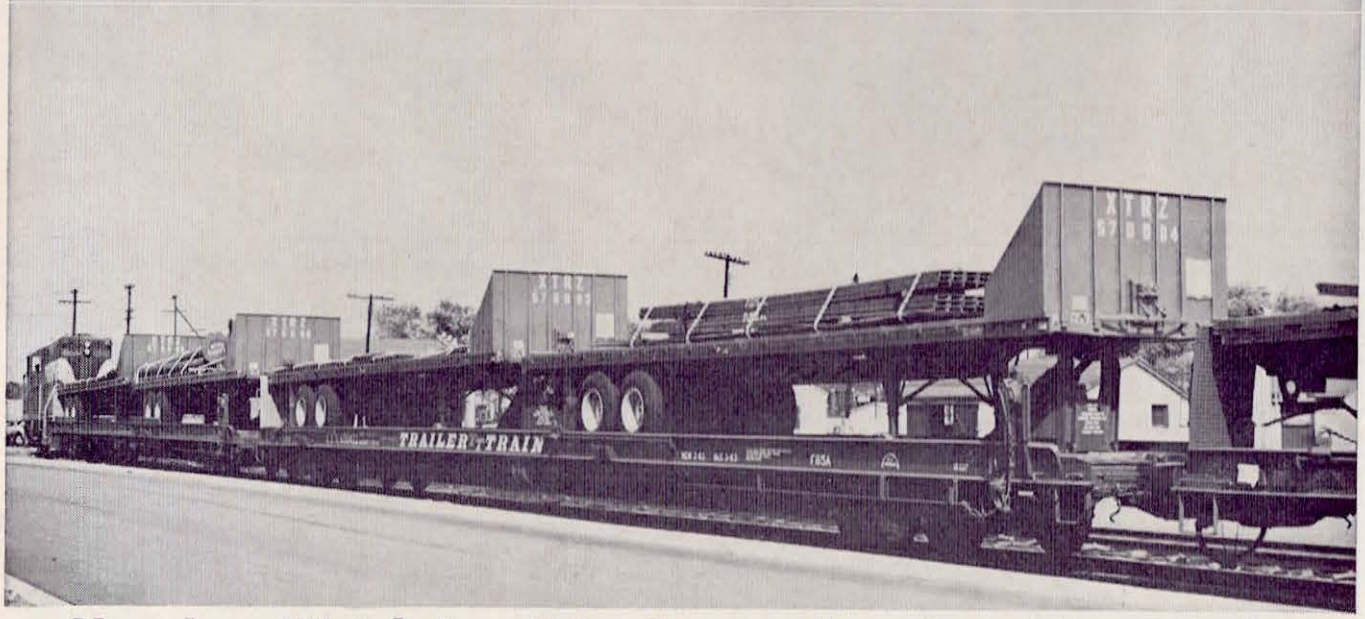
Reynolds worked with Southern, Barber-Colman and Pullman-Standard to develop extrusion designs that provide the extra strength, and keep construction costs low. Result: a box car designed for fast, low-cost shipping service. Southern has ordered 200 box cars equipped with aluminum doors.

Each Southern All-Door Box Car has two car-length door sides; each door consists of three sections. Supporting posts, also Reynolds Aluminum Extrusions, can be moved to the ends of the car when the door sections are rolled up. End posts are Reynolds Aluminum Extrusions, as well.

For details on the aluminum, and the aluminum know-how, that made these new All-Door Box Cars possible—or on any other railroad application—contact your local Reynolds office. Or write *Reynolds Metals Company, P. O. Box 2346-TM, Richmond 18, Virginia.*

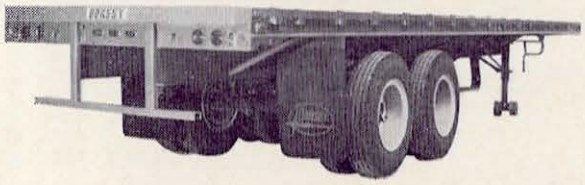
Watch Reynolds exciting TV program on NBC: The Dick Powell **Reynolds Aluminum Theatre,** Tuesday nights

Rugged...and Right for Piggyback Service
DORSEY'S NEW I-BEAM *Giant* PLATFORM



New Low Weight! • 25% Stronger! • Surprising Price!

(hundreds of pounds lighter) (than the original Giant)



Dorsey's new I-Beam Giant has the extra stamina to stand up under the most rigorous piggyback operation. Fabricated on the latest automatic welding machines, the high-tensile steel main frame is outstanding in workmanship as well as design. Strength is engineered into each part to meet its particular requirements and at the same time hold weight to a minimum.

Whether your operation calls for rugged platforms, deluxe insulated vans or low-cost freight trailers, it will pay you to call in Dorsey Special Product Division engineers.

Our complete line includes models designed to withstand the strain of piggyback duty and our manufacturing methods permit economical modifications to meet special requirements.

We welcome your most challenging problems — and the solutions we suggest will be based on more than fifty years of manufacturing during which Dorsey has contributed more than its share of important innovations to the trailer industry.

Without obligation, may we send you a brochure describing our plant facilities and products?

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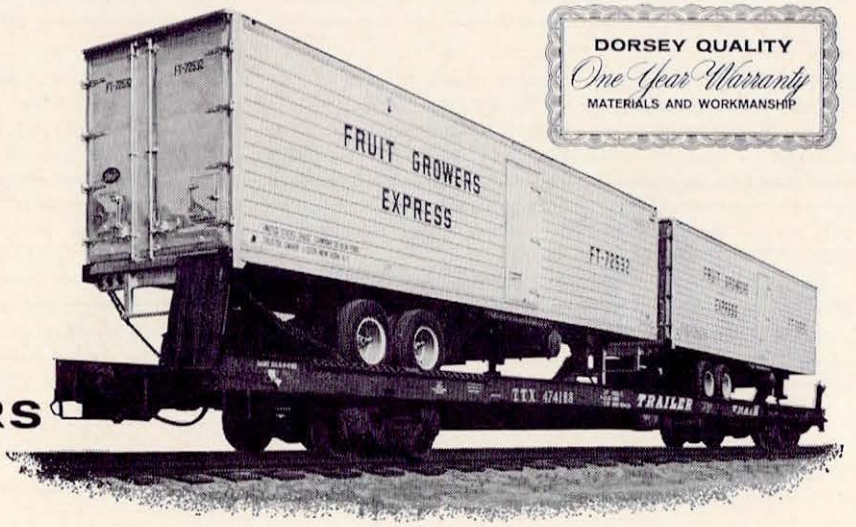
One Year Warranty
MATERIALS AND WORKMANSHIP



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1961-62

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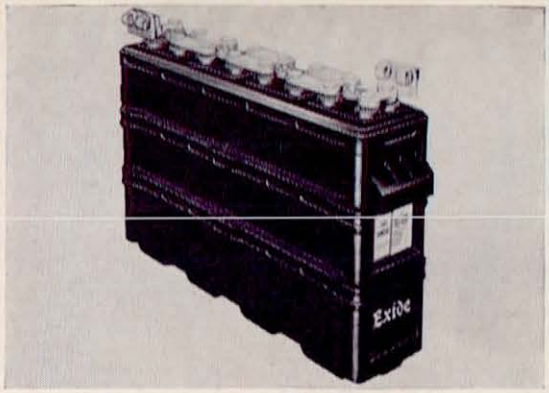


New Exide Diesel Starting Ability

. . . PLUS LONGER BATTERY LIFE, EASIER

Let's say your locomotive is standing in the yard. Outside temperature is down around freezing. The engineer pushes the starter button. The engine fails to respond immediately. He keeps pushing. How long can he do this before the battery runs down? Or how much capacity will be left in the battery when the engine does start? The new Exide-Ironclad diesel battery puts you ahead on both counts.

This battery has the special ability to deliver the high currents required to start a diesel locomotive—and to do it for a 25% longer period than the best flat plate batteries of equal capacity. If, for example, the best starting time you can get from a flat plate battery is a minute and a half or so, this battery will crank your engine for over two minutes.

This means that when an engine is balky, you can keep on cranking for a longer period to get it started. Also, after it starts, you still have an ample reserve of battery capacity for dependable operation of auxiliary equipment.

SQUARE TUBES

The simple reason for this superior performance lies in the construction of the battery. Notice, especially, the square tubes which make up the positive plates. Tubular construction of the positive plates has always been one of the unique characteristics of Exide-Ironclad Batteries. Originally, the tubes were round in cross section. Their square shape in the new diesel battery increases the total plate surface area and the volume of positive active material in the plates. These are the two key factors in determining battery capacity. Compared with flat plate batteries of equal capacity, this battery has 20% greater surface area. This advantage, in combination with the higher volume of active material, results in greater starting capacity and reserve capacity.

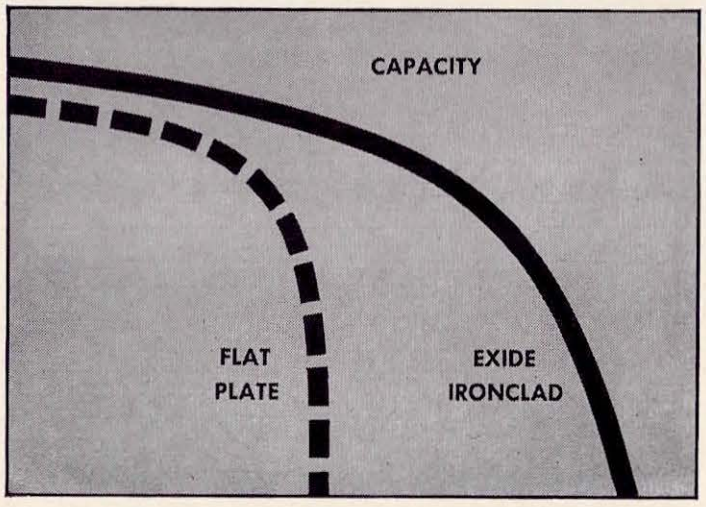
LONGER BATTERY LIFE

There is an important collateral benefit from the fact that this new Exide diesel battery has a larger reserve capacity after it starts the engine. It means that the battery is not discharged so deeply. Deep discharging shortens battery life. Therefore, since normal service is not so demanding on this battery, you can confidently expect a longer period of service life from it. Other factors which contribute to long life include the basic tubular construction and the patented corrosion-resistant grid alloy.

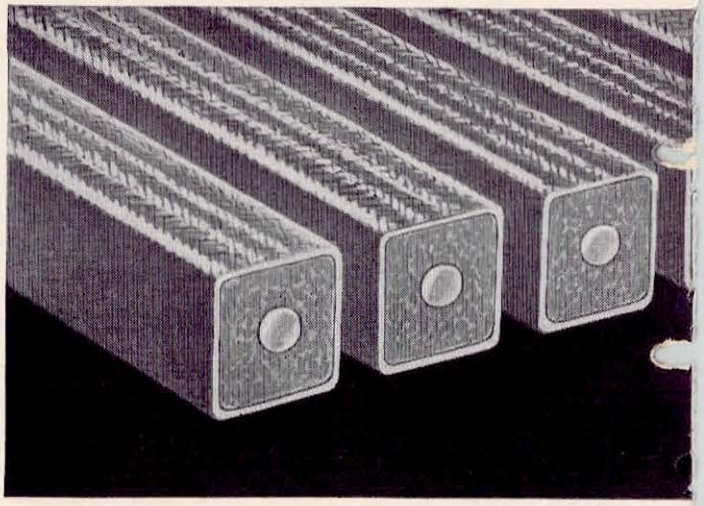
14% HIGHER INITIAL CAPACITY

Here is a battery that gives you full-rated capacity right from the start. It is a paradoxical characteristic of

LONGER STARTING POWER. This battery gives you power to keep turning the engine over after flat plate batteries have run down.



SQUARE TUBE CONSTRUCTION. Increases the surface area of positive plates. Also increases the amount of active material per plate. Hence you get extra power for diesel starting.



Battery Gives You 25% More from Same AMP-HR Capacity

MAINTENANCE, HIGHER INITIAL CAPACITY

other diesel batteries that when they are new they do not have the full-rated capacity you pay for. Generally you look for them to build up to capacity after some 20 to 25 cycles. This might take 3 to 6 months. If you install such a battery in the fall and have cold weather right away, you stand a good chance of not having sufficient reserve battery capacity.

In this new Exide battery, however, you get at least 14% more initial capacity than in flat plate batteries. This too is the result of the square tube construction of the positive plates. Since you are paying for full capacity, why not insist on it right from the start. You get it in this new Exide battery at no extra cost.

EASIER MAINTENANCE

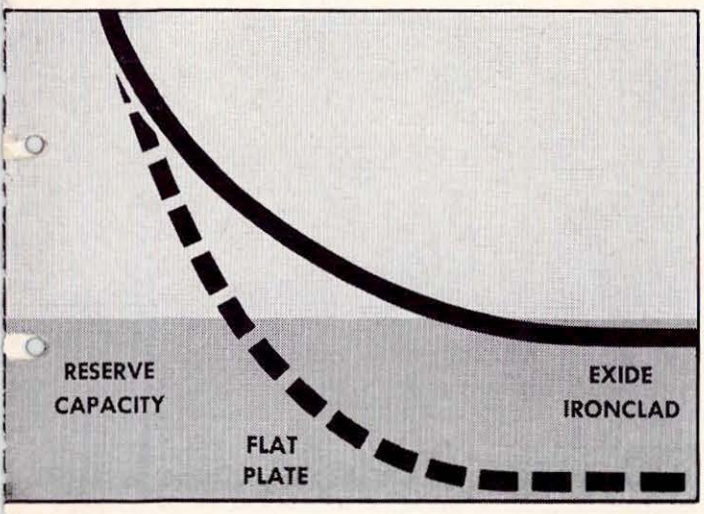
No discussion of the new Exide diesel battery would be complete without touching on how it eases maintenance. Interestingly, this is a result of a basic improvement in the negative plate—a part of the battery which is rarely discussed in comparing battery performance. Not only do the positive plates in this battery give you more power, but negative plates have been beefed up to match. They are thicker, stronger and heavier and made of materials of the highest purity. As a result, this battery can operate with a 25% lower floating current than flat plate batteries. This means electrolyte level goes down at a slower rate. During regular monthly maintenance, cells need less water. The job can be done faster and easier. And if a man should happen to miss one, there is an ample reservoir above the plates to protect them until the next time.

BY ALL MEANS, ASK THE PRICE

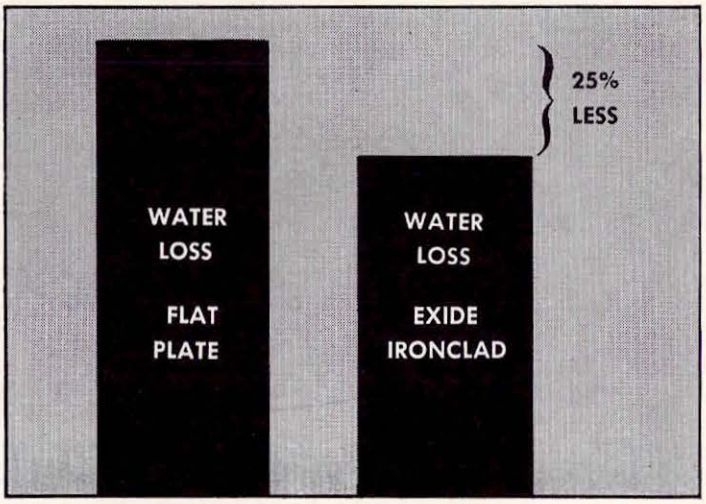
In spite of the many extra values you get in this new battery, the remarkable fact is that it doesn't cost you an extra penny. In fact, the price is actually lower than the price of the MGD Exide-Ironclad that it supplants. The battery is offered in just two capacity ratings: 420 and 280 amp-hr. Exterior dimensions are unchanged. If you are going to be in the market for diesel batteries soon, write for a copy of the descriptive sales bulletin. Exide Industrial Marketing Division, The Electric Storage Battery Company, Philadelphia 20, Pa.

Exide®
INDUSTRIAL MARKETING DIVISION
THE ELECTRIC STORAGE BATTERY COMPANY
ESB 75

SECRET OF LONG LIFE. This new Exide-Ironclad Battery doesn't discharge so deeply as flat plate batteries. Hence its life is lengthened.



NEEDS LESS WATERING. When maintenance time comes, the electrolyte in your new Exide-Ironclad is still well above the plates. Less water is needed to refill the cells than for flat plate batteries.



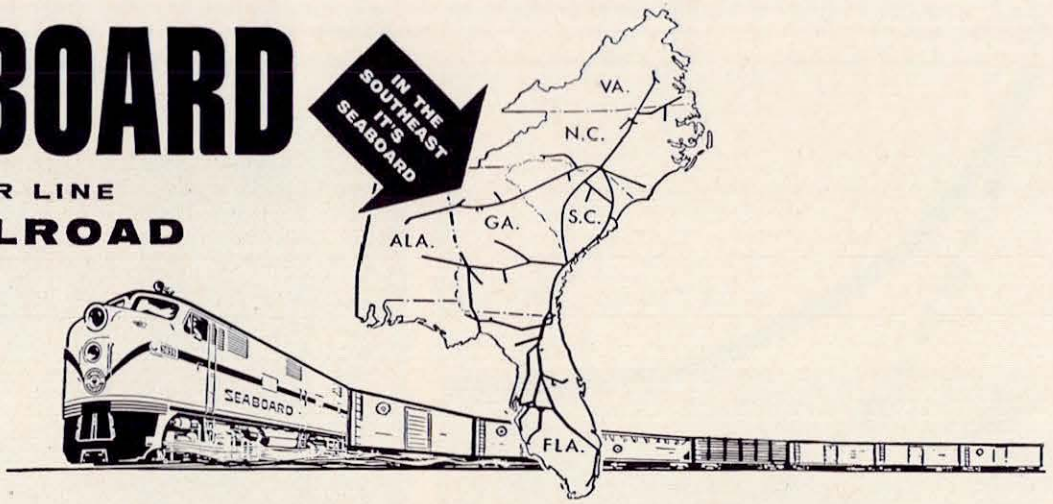
SOMETHING TO SHOUT ABOUT

This *talking* hot box detector was developed by Seaboard's own Communications and Signals people. It actually tells the train crew by radio if there's a hot journal in the long line of rolling freight cars — *and the exact axle affected.* But most of the time it shouts the *good news* that keeps your shipments highballing.

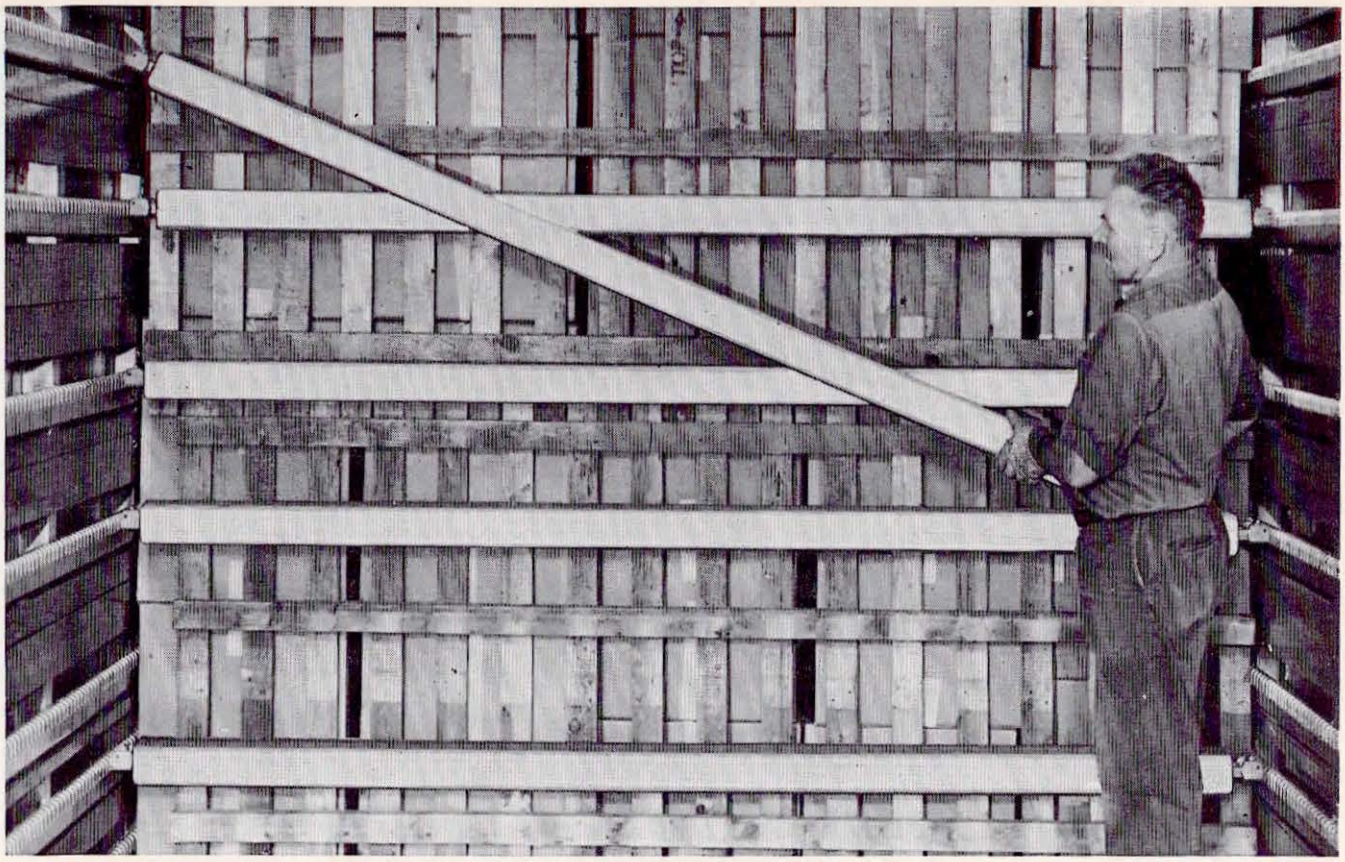
Strategically located throughout the Seaboard system, these electronic detectors are another of the modern devices which back up our determination to provide you the finest, most efficient rail shipping in the Southeast. For further evidence of that determination call your nearest Seaboard office, where an eager, informed staff is ready to work with you in solving any transportation problem.

We think you'll agree Seaboard Superior Service is *something* to **SHOUT** *about!*

SEABOARD
AIR LINE
RAILROAD



THE ROUTE OF COURTEOUS SERVICE



THIS MAN IS PUTTING UP A SOUND INVESTMENT no other load protection system costs less to install, maintain or replace!

He's installing the "one-man" aluminum crossmember, a component of the Sparton Easy Loader (SEL) freight car load protection system—one that will trim important dollars from operating costs for years to come... and one that will get your shippers' lading delivered without damage and on time!

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COST SAVING FLEXIBILITY FOR YOUR SHIPPERS

- **ALUMINUM-LIGHT "ONE-MAN" CROSSMEMBERS**

SEL crossmembers weigh only 40 pounds for fast, easy handling by *one man*.

- **STRENGTH TESTED**

SEL crossmembers have been tested to hold 6,000 pounds. Impact tests prove they offer long, durable service life.

- **QUICK, EASY INSTALLATION**

Automatic end-fittings latch or unlatch quickly and easily. *One man* does it—no straining or special care required.

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Non-Op Strike Fails To Stop FEC Trains

After four months, pickets still march at FEC terminals—but supervisory personnel are keeping the railroad running, and management is looking to resumption of full normal operations.

The advertising manager is now a watchman-clerk at the main shops; a passenger representative operates track motor cars; a superintendent is an engineman on a through freight run; on-line and off-line traffic representatives serve as station agents—and the Florida East Coast is still running, despite a four-month strike of non-operating employees and the refusal of the ops to cross picket lines.

Two mainline freight trains are being operated daily in each direction. Some branchline and terminal switching service has been restored. And FEC is pointing toward resumption of normal freight service, along with the "sooner or later" resumption of passenger operations.

As Raymond W. Wyckoff, assistant vice president and director of personnel, puts it: "We're making the utmost use of the personnel we've got left."

• **Per-diem payment down.** How well this is being done is indicated by the fact that FEC has handled all perishable traffic offered as well as most of other kinds of traffic—and is doing it so expeditiously that per-diem payments to other railways are actually less than they were under normal operations.

Moreover, without any safety hazards, the same four-man crew of supervisors handles trains of about 200 cars between Bowden yard (Jacksonville) and Hialeah yard (Miami), 342 miles, and returns with another train the following day. By contrast, under previous operations a five-man crew (including a fireman), handled the train from Bowden yard to New Smyrna, 98 miles, in 2 to 2½ hours and received a full day's pay (8 hours). A second crew took the train from New Smyrna to Fort Pierce, 117 miles, and, for 2½ to 3 hours work, got 1-1/17th days' pay. Still a third crew ran from Fort Pierce to Hialeah, 127 miles, in 3 hours and collected 1¼ days' pay each.

In other words, 15 men were employed and paid for each 8-hour run of 342 miles total. Converting this into an hourly rate for the time actually worked, the average pay for this run would be:

Enginemen	$11.00 per hour
Firemen	9.57 per hour
Conductors	8.79 per hour
Brakemen	8.75 per hour

• **Trouble starts.** The trouble which led to the present strike arose when 11 non-operating unions made a national demand for a 25-cent-per-hour wage increase and six months' advance notice if a reduction in force was to be made. Quite apart from the money involved, this was a completely unrealistic goal so far as FEC was concerned. With its rapidly fluctuating traffic depending upon the season, such advance notice would have seriously hampered operations. And the financial condition of the company also made the wage demands impossible to meet. The railway had just lost revenue averaging about $2.5 million annually through cessation of shipments to and from Cuba via the car ferry between West Palm Beach and Havana. Moreover, the road had just emerged from about 30 years' bankruptcy and had only a $2-million operating fund allowed it by the court to meet the losses it was incurring.

Unions decline

For this reason, Edward Ball, chairman of the board, asked that the unions negotiate with the company instead of nationally, to arrive at some basis which would permit the continuing operation of the line. The unions declined and insisted that FEC abide by the national agreement (calling for a 10.28-cent boost). When the railway refused to do this, negotiations were broken off last October, though the strike was not called until Jan. 23, 1963—a move viewed by FEC as an attempt to wreak the most possible harm to the railway and its customers, since the strike date coincided with the height of the tourist season and also the perishable shipping season.

• **Ops stay out.** Operating unions refused to cross the non-ops picket lines, and all traffic came to a grinding halt, temporarily. An embargo was declared on all freight and passenger service. This produced a unique situation, since Florida's thickly populated East Coast has no other railway service between Jacksonville and West Palm Beach, 299 miles.

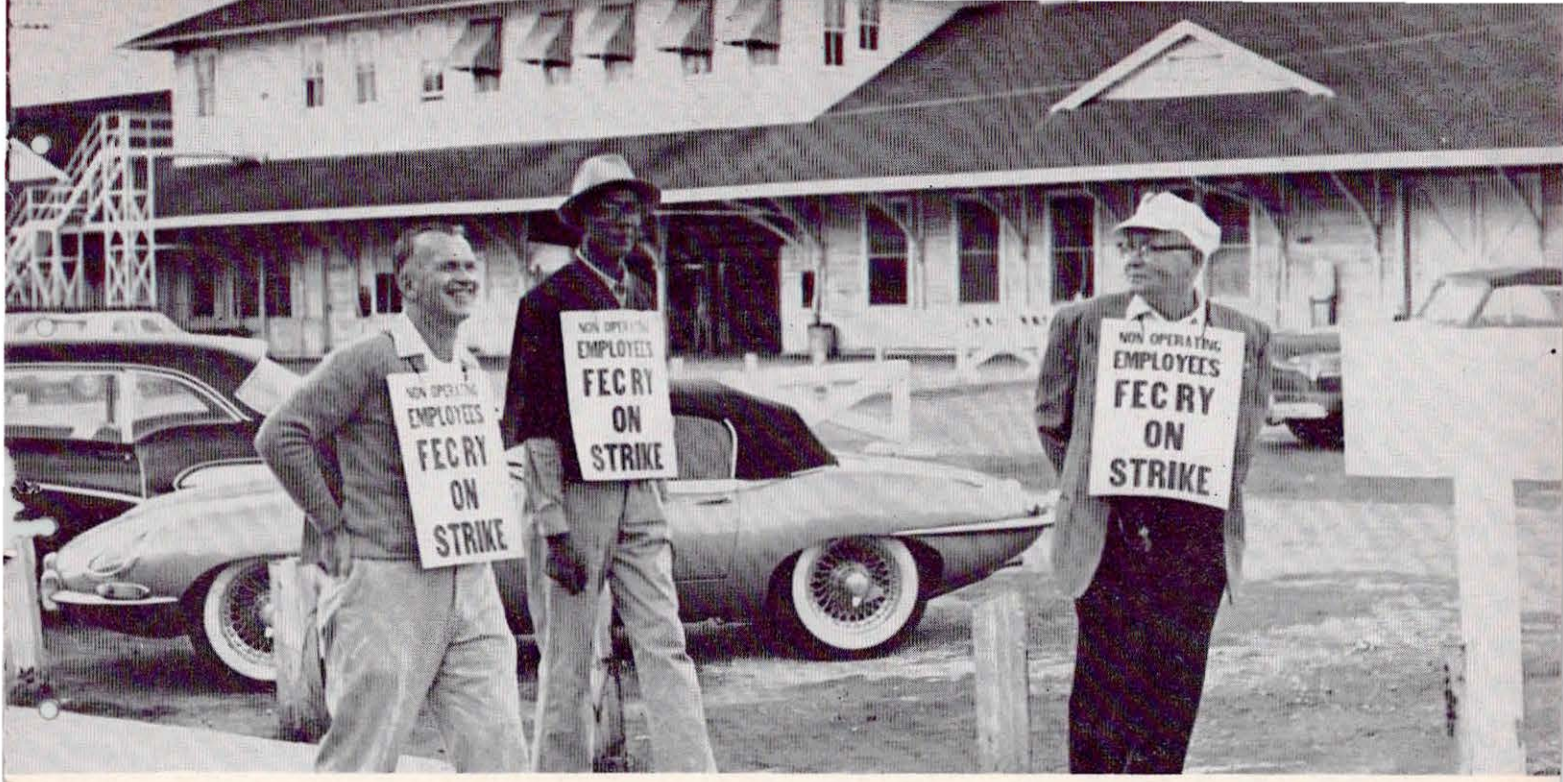
Normally, Atlantic Coast Line trains to Miami operate over FEC from Jacksonville. They were immediately re-routed over the Jacksonville-Tampa line of the Coast Line as far as Auburndale and turned over to the Seaboard Air Line's main Jacksonville-Miami line at that point. Seaboard, paralleling FEC from West Palm Beach to Miami, thus rendered service to this densely populated resort area. For the cities between Jacksonville and West Palm Beach, such as Daytona Beach, Coast Line operated buses to connect with its trains at Sanford.

Freight service presented a real problem. Unlike most Florida citrus, the Indian River variety raised along the FEC had been but little damaged by the hard freeze that ruined much of the interior fruit. Also, winter vegetables produced in large quantities along the FEC branch line between Fort Pierce and Lake Harbor, 72 miles, were being harvested and required hauling.

Further, the huge construction activities at Cape Canaveral, made necessary by the multi-billion-dollar Nova moonshot project, were being crippled for lack of transportation.

Trains start running. At first, Chairman Ball made efforts to meet with the unions and negotiate on some reasonable basis. They refused, stating that they felt FEC was bound by the national agreement—in which it had actually had no part and had always refused to recognize. When Mr. Ball saw the unions were adamant, he instructed W. L. Thornton, vice president and chief operating officer, to get freight trains in operation. On Feb. 3, ten days after train operation had ceased, it began again. One train in each direction between Bowden (Jacksonville) and Hialeah (Miami) began operations. Another train made the 72-mile run along the Lake Okeechobee branch from Fort Pierce.

By March 30, this operation was sufficiently "bedded down" so that the Okeechobee branch line operation was extended over the main line to Jacksonville, with one train in each direction daily. A switching run has been established between Belle Glade, where this latter through-train terminates, and the west end of the branch. Switching service has also been established at Bowden and Hialeah yards. Train service has gradually been increased to serve the insistent need of the perishable shippers, as well as other customers. The winter potato crop was



WIDE WORLD PHOTO

handled by setting out and picking up cars at two stations only—Bunnell and St. Augustine.

(In the meantime, the ops declared a formal strike, after FEC attempted to place work-rule changes in effect. The notices were withdrawn and the strike called off, however, after the Justice Department filed a suit in federal court on behalf of the National Mediation Board. At issue is the right of a railroad to withdraw from a general Railway Labor Act case, as FEC did from the national work-rules case March 12.)

● **Trouble on the line.** FEC's service restoration was accomplished despite more than 40 separate attempts at sabotage, which have resulted only in derailment of five cars in Bowden yard because of a spiked switch. Attempts have been made to set fire to a bridge; ropes with sash-weights attached have been stretched across the right-of-way in attempts to shatter the front windows of diesels; signal cables have been cut; switches have been spiked.

FEC is a comparatively short railroad, just over 500 miles of line, but its officers are by no means short on versatility or fortitude. The train crews now consist entirely of supervisory forces. At the throttle of the lead unit of the five or six diesels which pull the long trains there may be anybody from the superintendent to the assistant road foreman of engines. In the caboose may be anybody from the superintendent of safety to a general office clerk. All trains are operated on train orders. The dispatchers won't cross the picket lines, but supervisors handle the dispatching—materially aided by radio communication with all trains. Since the mainline is entirely double-tracked and there is no passenger-train interference, freight trains can be dispatched with maximum efficiency.

Stations are manned in some cases by supervisory agents, in others by traffic representatives who have had some station experience.

Four off-line traffic offices, as well as seven on-line offices, are still maintained but they have been skeletonized and several of their representatives are now engaged in various operating-department jobs.

● **Shops busy.** Routine work, such as oiling and packing, is handled at the company's shops by supervisors. Even the vice president and chief mechanical officer lend a hand and, as noted, the watchman-clerk at the shops is the road's advertising manager. Annual inspection and other heavy work on the locomotives is done at a manufacturer's plant in Jacksonville, which FEC strikers picketed, but only briefly.

Willing to negotiate

Track is being kept in shape by contract maintenance gangs, as well as by one gang employed by the railway.

Throughout the difficulty, Chairman Ball has maintained a willingness to deal with striking employees. He had a meeting with them May 10, only to be confronted by additional demands. The Brotherhood of Railway Signalmen, for example, on strike now for a 10.28-cents-per-hour increase, presented an additional demand for 25 cents per hour, to be effective May 1, 1963.

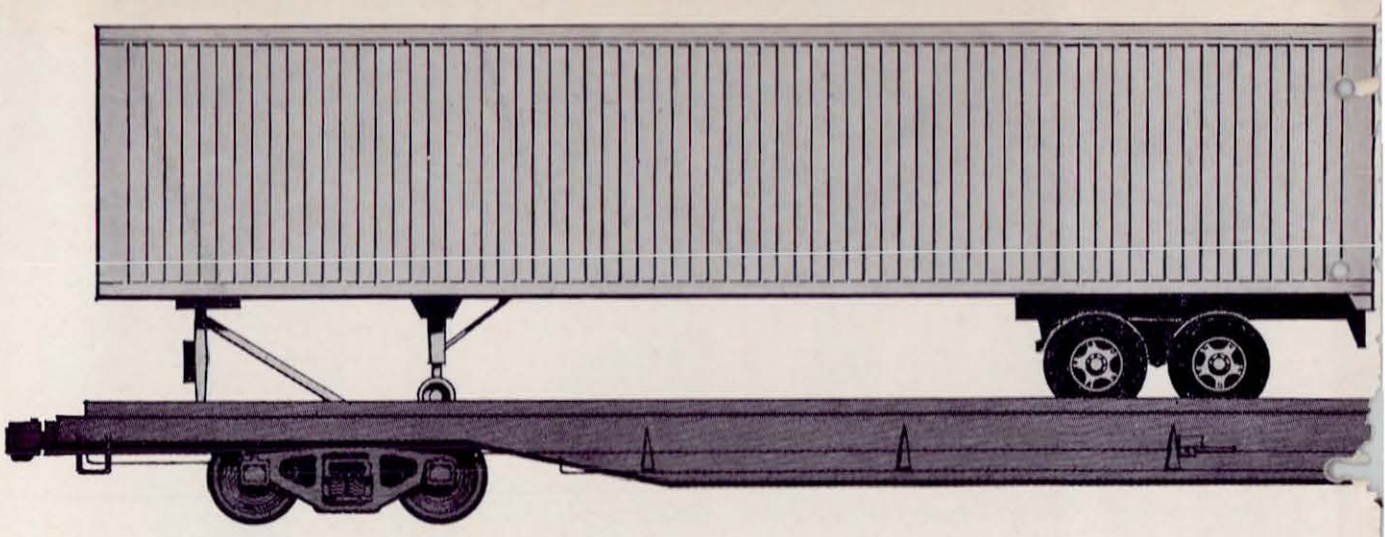
However, when the suggestion was made that Mr. Ball go to Washington for a meeting, he refused firmly. In a letter to all the striking general chairmen, with copies to Secretary of Labor Wirtz, his assistant and Governor Farris Bryant of Florida, Mr. Ball made his position clear. The dispute, he declared, is entirely a Florida dispute, between a Florida company and its employees, who are all Florida residents. "I see no reason," he stated, "why either the unions or the railway should waste money in traveling nearly a thousand miles to discuss what is purely a Florida problem with a group of outsiders."

● **Go it alone.** A statement issued by FEC amplifies Mr. Ball's opinion: "It is the position of the Florida East Coast Railway Company that it has the right to negotiate its own wage and rule contracts. It is this concept that is being attacked by the national labor groups."

Following this reasoning, Chairman Ball, on May 15, turned down Secretary Wirtz' proposal that he submit to arbitration. The unions accepted, according to the Labor Department.

In discussing his refusal to arbitrate, Chairman Ball stated that he expects normal freight service to be resumed shortly—including the spotting of cars on company sidings instead of on team tracks, as at present. He also said he expects passenger service to be resumed sooner or later.

His telegram to Labor Secretary Wirtz was short and to the point. It summed up: "The railway does not desire to submit the issue to non-interested parties to settle the questions in dispute."



Why (USS) High Strength Steels in new cars are big money makers

Railroads are recapturing freight business with new cars designed to do specific jobs at *lower costs*. 85-foot tri-level flat cars each haul 12 to 15 automobiles. A new ore car carries 5½ tons more but is shorter and lighter than cars previously used.

Many of these new car designs are possible because of the development by U. S. Steel of a family of high strength steels to give carbuilders just what they need to produce stronger, lighter, less expensive cars. High strength steels have high shock resistance and a modulus of elasticity about three times that of light-metal alloys.

USS COR-TEN brand steel was our first high-strength low-alloy steel, and the industry's first. COR-TEN Steel has a yield point of 50,000 psi and exceptional resistance to atmospheric corrosion. Nearly 400,000 cars have been built with COR-TEN Steel since its introduction in 1933 . . . and most of them are still in service today, thirty years later.

This mark tells you a product is made of modern, dependable Steel.

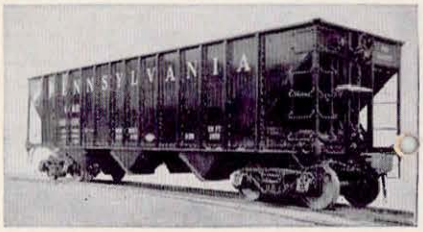
With stronger, tougher, more corrosion-resistant COR-TEN Steel, freight cars can be made with reduced section thicknesses to cut dead weight and increase payload without any sacrifice of strength. When COR-TEN Steel is used in the same thicknesses as structural carbon steel, the cars weigh no more but give increased life—50% longer is not unusual—before major overhaul.

And you get the extra benefit of longer paint life on COR-TEN Steel.

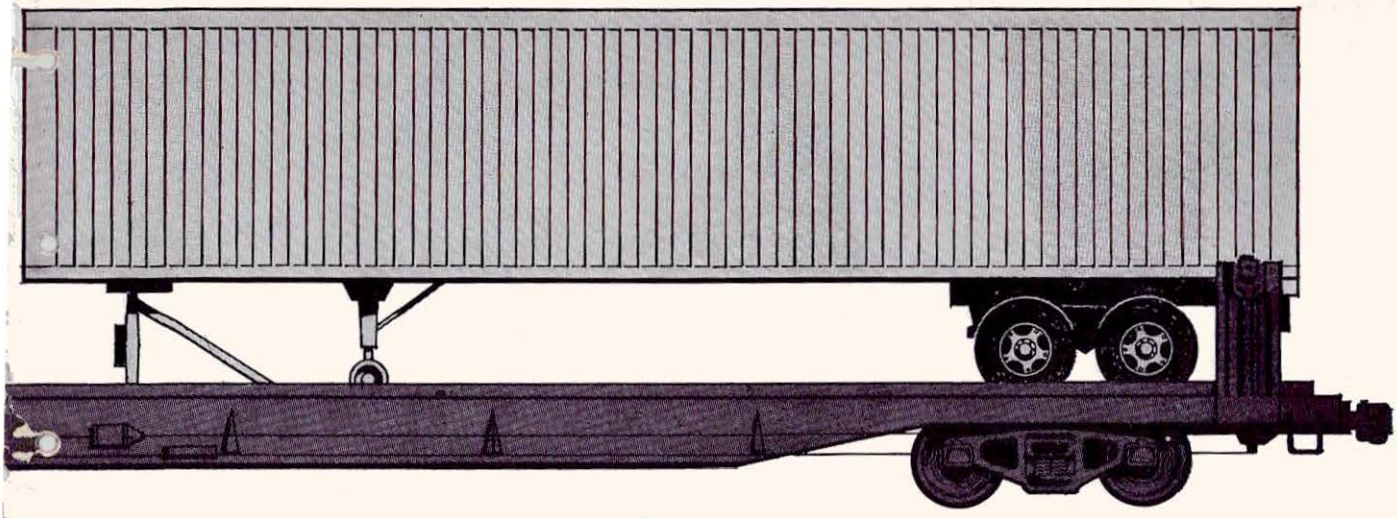
USS TRI-TEN High-Strength Low-Alloy Steel has the same high yield point as COR-TEN brand — 50,000 psi minimum. It is one of the toughest high-strength low-alloy steels available, and is specially suited to low temperature service. In addition, USS TRI-TEN Steel has good weldability. It resists shock loads and abrasion and its atmospheric corrosion resistance equals that of copper steel. These advantages have mad USS TRI-TEN Steel widely used for center sills, car frames, and other heavy-duty parts.

USS EX-TEN brand, the newest member of our high strength family, has the best strength to cost ratio. is made in five grades with yield points of 45,000, 50,000, 55,000, 60,000 and 65,000 psi minimum, and has a wide range of product availability. USS EX-TEN Steel fills the need for an economical high strength steel for applications in which greate

650 box cars were built with USS COR-TEN Steel for greater payload capacity combined with lower operating and maintenance costs.



Standardized 70-ton hopper car built with USS COR-TEN Steel to obtain three economic benefits: (1) longer car life, (2) lower maintenance costs, and (3) greater equipment availability.



strength, to gain weight reduction, is the primary need.

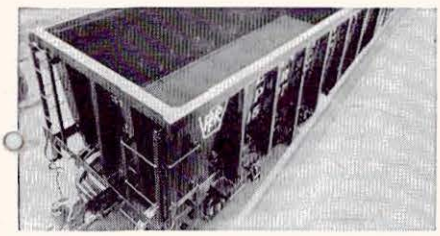
Atmospheric corrosion resistance is the same as for carbon steel. Weldability and ductility are good.

For further information, write United States Steel, 525 William Penn Place, Pittsburgh 30, Pennsylvania. USS, COR-TEN, TRI-TEN, and EX-TEN are registered trademarks.

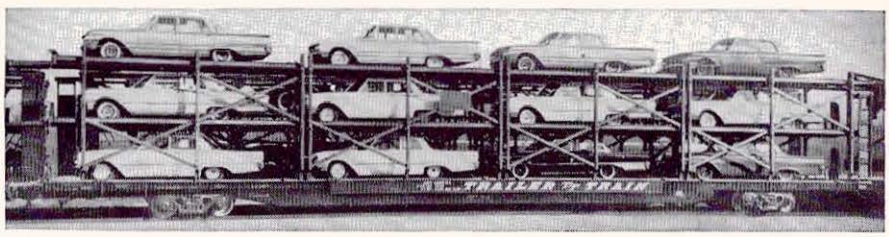
United States Steel Corporation • Columbia-Geneva Steel Division • Tennessee Coal and Iron Division
United States Steel Supply Division
United States Steel Export Company

Mechanical Properties

BRAND SIZE	COR-TEN 2½" and under	TRI-TEN ¾" and under	EX-TEN 45 1½" and under	EX-TEN 50 1½" and under	EX-TEN 55 ¾" and under	EX-TEN 60 ⅜" and under	EX-TEN 65 ⅜" and under
Yield point, min., psi	50,000	50,000	45,000	50,000	55,000	60,000	65,000
Tensile strength, min., psi	70,000	70,000	60,000	65,000	70,000	75,000	80,000
Elongation in 8", min., %	19	18	19	18	17	16	15
Resistance to atmospheric corrosion	4 to 6 times carbon	2 times carbon steel	Equal carbon steel	Equal carbon steel	Equal carbon steel	Equal carbon steel	Equal carbon steel



Ore car built with USS COR-TEN Steel is 16 feet shorter than a standard 70-ton hopper car, weighs 5½ tons less, and has a load limit of 83 tons.



LO-DEK flat car—built 10 tons lighter and 10 inches lower with USS TRI-TEN Steel. Carries 12 to 15 automobiles, two truck trailers or standard containers. *LO-DEK is a registered trademark of Pullman-Standard, a division of Pullman, Incorporated.*

USS **United States Steel**

Shippers to Meet During Exposition

Shippers will be meeting October 14-16 during the second week of the American Railway Progress Exposition in Chicago.

The annual meeting of the National Association of Shippers Advisory Boards will start Monday, October 14, in Rooms 4 through 9 at McCormick Place. At noon on October 14 the NASAB will hold a luncheon with the Freight Loss and Damage Prevention Section, AAR, in Room 8, McCormick Place. Attendance will be by invitation.

On Tuesday, October 15, an all-day meeting of the NASAB's board of directors is scheduled for the Madison Room, No. 111, Morrison Hotel. On the same date the annual meeting of the association will be continued at the Morrison Hotel.

A continuation of the NASAB annual meeting will be held Wednesday morning, October 16, in the Ballroom, Morrison Hotel. At Wednesday noon the annual joint luncheon will be held in the Terrace Casino, Morrison Hotel. Cooperating in the luncheon are The Traffic Club of Chicago, Womens Traffic Club of Chicago and the Mid-West Shippers Advisory Board. The speaker has not been announced.

• **Additions to program.** Since the tentative program was published (RA, April 15, p. 36) several meetings and other events have been added to the schedule:

Tuesday afternoon, October 8—an added pre-exposition event will be a meeting of the General Committee, Purchases and Stores Division, AAR, in Room 707, AAR Chicago headquarters.

There will also be 11 committee meetings, Engineering Division, AAR (AREA) at McCormick Place on Tuesday, October 8. In addition, five AREA committee meetings will be held at the Morrison Hotel and one committee meeting at AREA headquarters. The AREA Nominating Committee will meet Tuesday afternoon at AREA headquarters.

Wednesday morning, October 9—B. F. Biaggini, vice president, Southern Pacific, and C. D. Buford, vice president, AAR Operations and Maintenance Department, will be speakers at the joint opening session of the Engineering Division and the Communication and Signal Section, AAR.

Wednesday noon, October 9—Railway Progress Institute luncheon (by invitation), Lakeside Room, McCormick Place.

Wednesday noon, October 9—Educational Committee, Chicago Transportation Club, will hold luncheon at McCormick Place, then will visit exhibits. About 300 are expected to attend.

Thursday morning, October 10—General Committee, Engineering Division, AAR (Board of Direction, AREA) will meet in Room C, McCormick Place. Also, five AREA committees will meet during this time at McCormick Place.

Thursday noon, October 10—Joint AAR-Suppliers luncheon is presently planned for Plus 7 level, McCormick Place, with estimated 3,500-4,000 attendance. It will have closed-circuit television coverage.

Friday morning, October 11—Committee meeting, Engineering Division, AAR, Room C, McCormick Place.

Friday afternoon, October 11—General Committee, Purchases and Stores Division, Room 10, McCormick Place.

Monday, October 14—Speaker at annual meeting, Roadmasters and Maintenance of Way Association, will be J. H. Loyd, vice president operations, Missouri Pacific.

Monday, October 14—Committee meetings, Mechanical Division, at AAR Chicago headquarters.

Tuesday morning, October 15—Annual meeting, Association of Track and Structure Suppliers, Room B, McCormick Place.

Tuesday, October 15—Committee meetings, Mechanical Division, AAR, at AAR Chicago headquarters.

Tuesday evening, October 15—Banquet of Roadmasters and Bridge & Building Association and Association of Track and Structure Suppliers (by invitation), Pick-Congress Hotel.

Wednesday, October 16—Committee meetings, Mechanical Division, at AAR Chicago headquarters.

Since the Combined Railway Suppliers exhibit list was published (RA March 18, p. 24 and April 8, p. 72), 40 companies have been added to the 273 indoor and outdoor exhibitors previously listed. With two companies withdrawing from the exhibits, 309 exhibitors were listed as of May 16. Added companies are shown in the accompanying list.

ADDITIONS TO THE LIST:

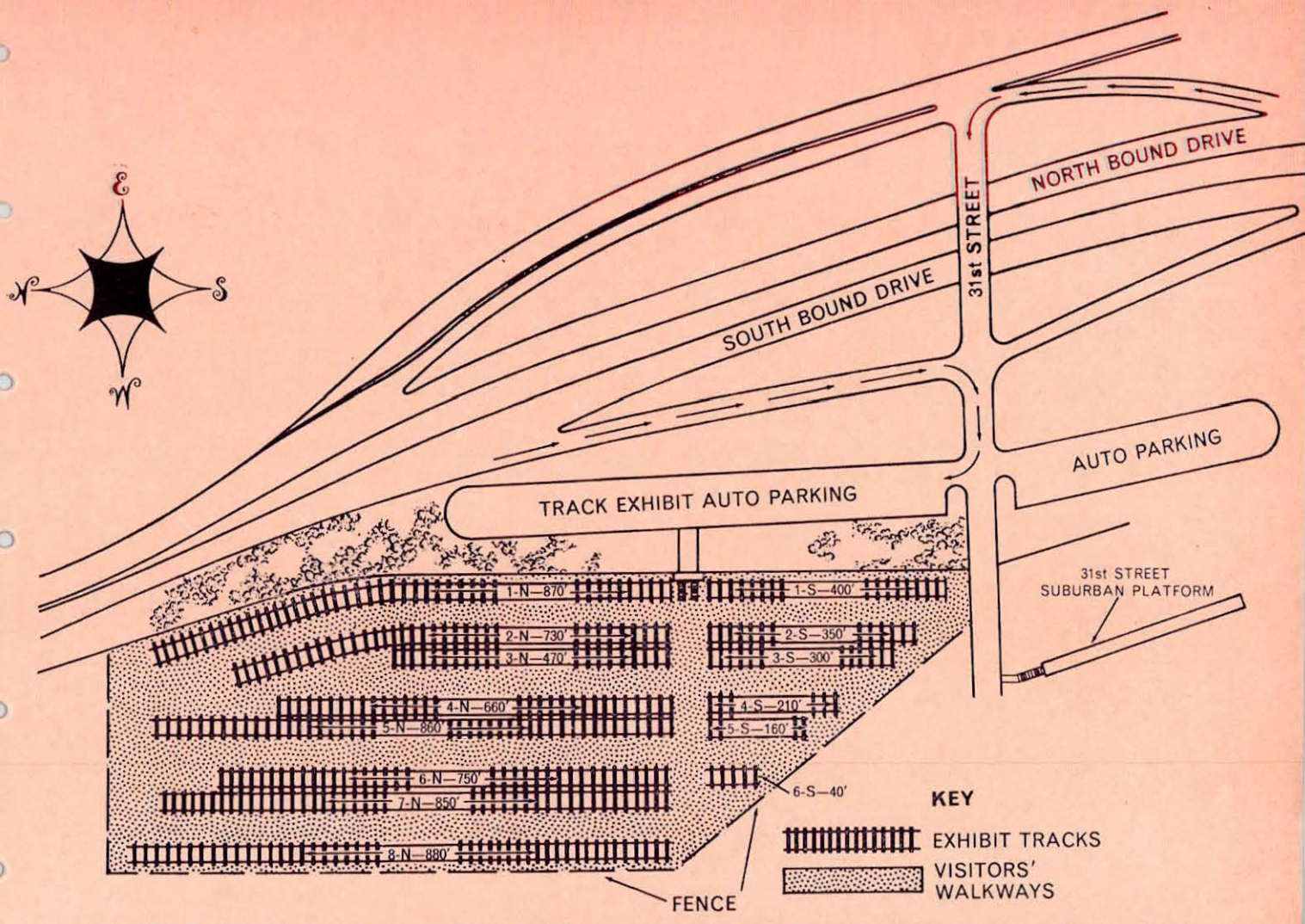
Combined Railway Suppliers Exhibit

INDOOR EXHIBITORS:

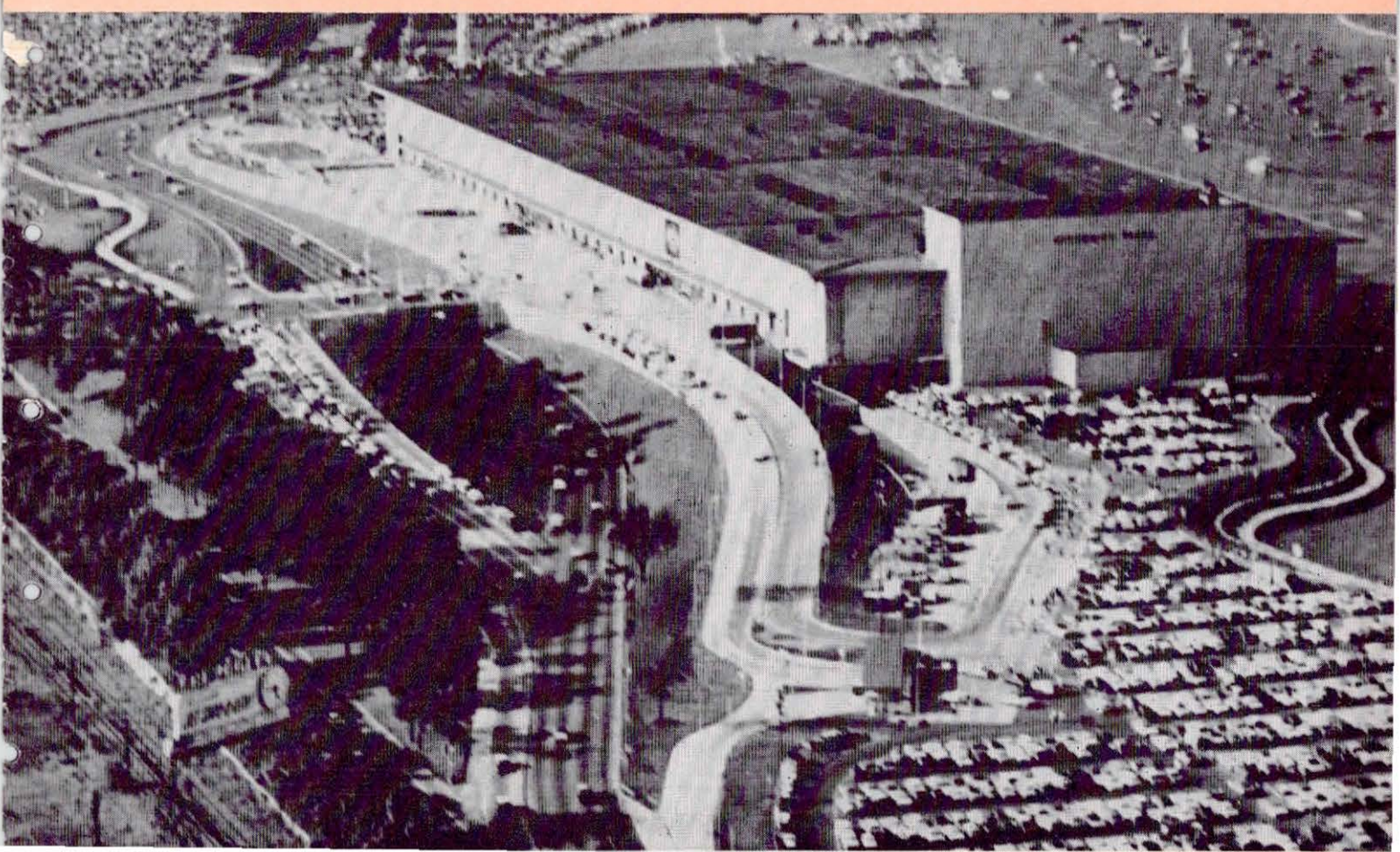
Binkley Co.
Bondarc Corp.
Chapman Chemical Co.
Chandeysson Electric Co.
Cox Co., W. T.
Dempster Brothers, Inc.
DO Company
Drott Manufacturing Corp.
Evans Products Co.
Impact Register Co.
Industrial Service & Salvage Corp.
International Railroads' Weighing Corp.
International Steel Co., Rwy. Division
M&J Diesel Locomotive Filter Co.
Movet Industries, Inc.
Nordson Corp.
Progressive Railroading
Schroeder Brothers Corp.
Servo Electronic Switch & Signal Co.
Shunk Manufacturing Co., Inc.
Townsend Co.
Union Spring & Mfg. Co.
United States Gypsum Co.
U.S. Radium Corp.
Westran Corp.
Wheel Checkers
Yale & Towne Mfg. Co., The
Young & Greenwalt Co.

TRACK EXHIBITORS:

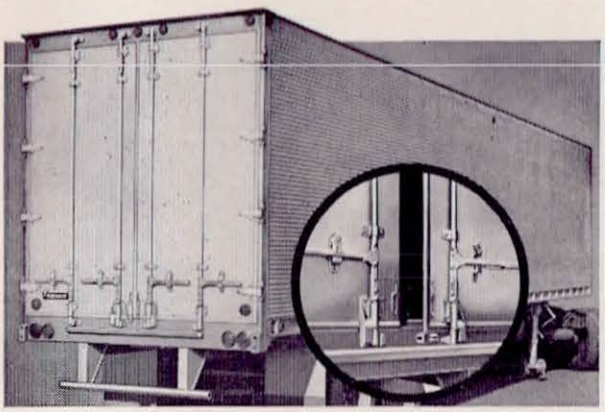
Dana Corp.
Dempster Brothers, Inc.
Hyatt Bearings Division, General Motors Corp.
National Cylinder Gas Div., Chemetron Corp.
National Steel Corp.
Orton Crane & Shovel Co.
Preco, Inc.
Signode Steel Strapping Co.
Strick Trailers
Thermo King Corp.
United States Steel Corp.
Westinghouse Air Brake Co.



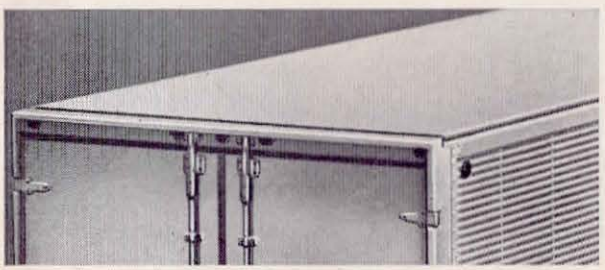
Combined Railway Suppliers Exhibits at the American Railway Progress Exposition, October 9-16, Chicago, will be located outdoors at IC's 31st St. Yard (above), indoors, at McCormick Place (below).



Features Like These Make Fruehauf Volume★Vans The Most Profitable Trailers For Piggybacking!



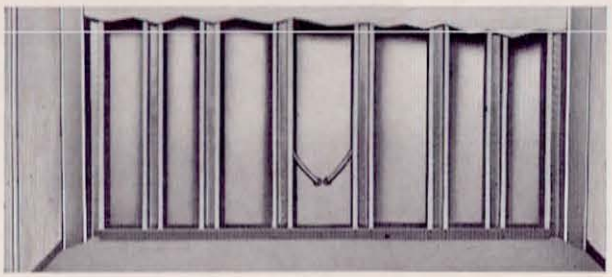
Fruehauf welds door posts, header, rear cross-member, bumper, light boxes and reinforcements into a single structure of tremendous strength and rigidity. Exclusive Antirax* Door Latches (circle inset) mesh teeth on latching cam with teeth on rear end for solid, tightly sealed fit, stabilizing entire rear end. The use of four lock rods (main illustration) eliminates the need for "bull boards", thus reducing cost, cutting weight, and adding to inside cube.



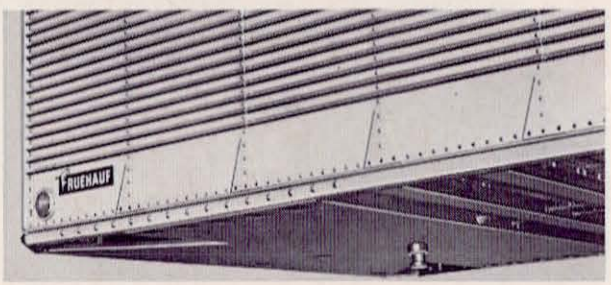
Fruehauf's water-tight, dust-proof, *one-piece* roof is *one sheet* of aluminum from end to end and edge to edge. Roof bows are bonded to roof for extra strength and rigidity. Edges are locked in grooves with tight-fitting aluminum moldings. All fastenings are made in a rib of the top rail extrusion *completely outside* the trailer itself. Result: Your cargoes are protected against dirt and moisture when you piggyback with Fruehauf Volume☆Vans.

Fruehauf Patent Pending

FRUEHAUF TRAILERS
A FRUEHAUF DIVISION



Fruehauf's exclusive "piggyback front end" structure features 8 full-height, heat-treated, heavy-duty posts for unmatched strength and safety. In addition to the corner posts—which tie the front wall to the side walls—there are *six* intermediate posts spaced across the front wall. This reinforces the entire front end, helps to explain why Fruehauf Volume☆Vans stand up better, last longer, require less maintenance on piggyback operations.



Fruehauf's wider, flatter, low level coupler adds capacity, increases stanchion strength. The king pin is mounted in a sturdy casting, is Magnaflux-tested to insure perfection. Multiple box-section construction assures ruggedness and wide surface box members permit coupling from sharp angles, an aid to faster piggyback loading. Extra strength, safety, and efficiency are yours with Fruehauf Volume☆ Vans handling your piggyback loads.

These are just some of the features which make Fruehauf Volume☆Vans the first choice of piggyback operators all over America. Your Fruehauf representative will tell you all the reasons why they're your most profitable investment.

FRUEHAUF TRAILER COMPANY
10953 Harper Avenue • Detroit 32, Michigan

"ENGINEERED TRANSPORTATION"
—The Key to Transportation Savings

TESTS PROVE FRUEHAUFS EXCEED PIGGYBACK STRENGTH REQUIREMENTS!

In recent extensive forward and reverse tests with actual rail car equipment to determine the strains imposed by impact, Fruehauf Trailers and all associated equipment far exceeded specifications of 5 G's with 42,000 pound payload!

New Products...New Ideas...New Name

Almost fifty years ago, we took our name from the principal products that we manufactured—and became the Union Asbestos and Rubber Company.

As progress demanded, we entered new fields, developed new products—diversified to an extent that our old name, respected as it is, no longer defines our place in industry.

We continue to make asbestos and rubber products—very good ones. They are made by an important and progressive division of our company. But our planned growth has led us in other directions too.

Our movement into the field of modern material handling with new products and new ideas, won quick recognition and leadership. Equipment for storing, moving and protecting goods in distribution is the major part of our business.

Today, we can move, store and protect almost anything —from massive machine components . . . to package goods . . . to miniature electronic marvels. We even help housewives move groceries around the market and out to the car.

We've grown . . . we've diversified. In keeping . . . we've changed our name from Union Asbestos and Rubber Company to UNARCO Industries, Inc. That's our new symbol that you see up top.

Sturdi-Bilt Material Handling Division, Chicago, Illinois. Storage Racks and Systems, Power and Gravity Conveyors and Systems. Mechanical Dock Boards.

Folding Carrier Division, Oklahoma City, Oklahoma. Nest-Kart Shopping Carts. Stock-Mor Store Trucks. Handi-Kart Compact Shopping Carts. Self-Service Luggage Karts. Greenhouse and Nursery Carts.

Equipment Specialties Division, Chicago, Illinois. Load-protection equipment for railroad freight cars and refrigerator cars: Load Dividers and Side Fillers for freight cars; Electric Air Circulators . . . Equipco Hand Brake Division: Hand Brakes for freight cars.

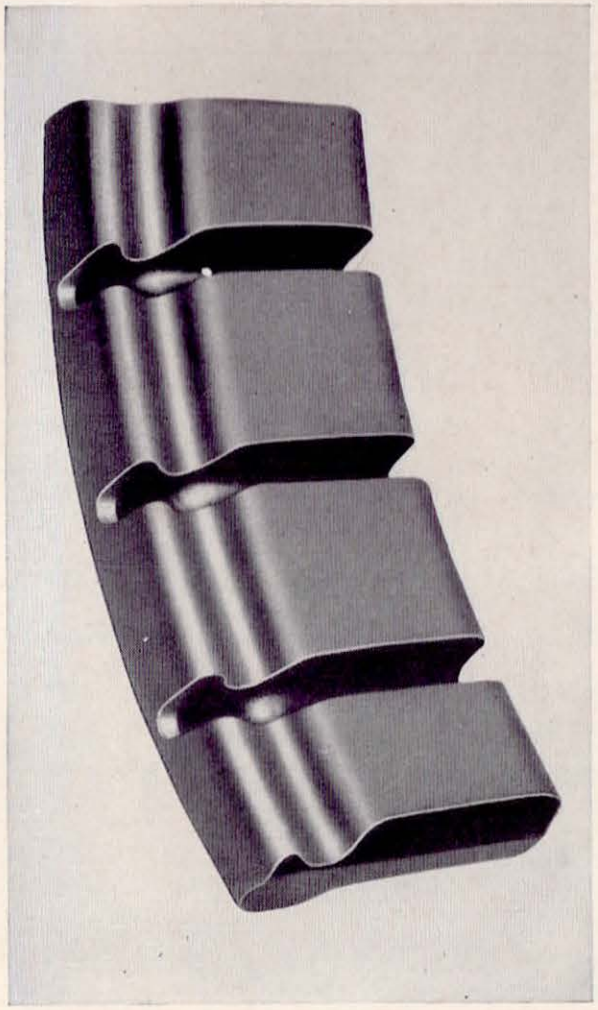
Chemical and Asbestos Division, Bloomington, Illinois. Polyurethane extreme low-temperature insulations. Asbestos packings, seals, gaskets, insulation and cloth. UNARCOBOARD, Inorganic Hardboard material.

©-1963 UNARCO Industries, Inc.

UNARCO INDUSTRIES, INC. 332 SOUTH MICHIGAN AVENUE • CHICAGO 4, ILLINOIS
FORMERLY UNION ASBESTOS & RUBBER COMPANY
PRINCIPAL PLANTS: OKLAHOMA CITY, OKLAHOMA • BLOOMINGTON, ILLINOIS • SPRINGFIELD, TENNESSEE • MARSHVILLE, NORTH CAROLINA • GRAND HAVEN, MICHIGAN

COBRA® SHOES contribute

. . . in suburban service



A midwestern railroad operates a fleet of 213 cars in suburban service equipped with COBRA Flanged Brake Shoes and WABCO "G" Tread Brake units.

- **Low shoe cost per mile**
- **Protection from thermal cracked wheels**
- **Fewer replacements**
- **Lower maintenance costs**

All of which produce these outstanding savings:

Yearly brake shoe savings per car $265.91
Yearly wheel savings per car 371.42
Total savings per car per year 637.33

PLUS FACTORS: Dead weight reduction of 2.5 tons per car. Rigging eliminated.

Important facts about the COBRA SHOE (1) Friction value is stable. (2) High friction value, permitting low shoe forces, and simplified rigging contributes importantly to car design. (3) Stopping distances meet existing standards — wet or dry — hot or cold. (4) With braking performance matched, wheel mileage between turnings is increased 50% to 100%. Shoe mileage is increased 400% to 500%. (5) Satin-smooth running and stops. COBRA Shoes are used by approximately 200 companies, including 60 Class I Railroads of the U.S.A.

THE COBRA SHOE . . . a product of the combined research facilities of

WESTINGHOUSE AIR BRAKE COMPANY, Specialists in Braking . . .

outstanding economies

...in passenger service

Seventeen cars on a crack passenger train were equipped with COBRA Shoes. Here are the results for average yearly mileage of 300,000 miles per car compared with a companion train equipped with cast-iron shoes:

- **COBRA Shoe life–38,095 miles per shoe**
- **Cast-iron shoe life–7500 miles per shoe**
- **Wheel life with COBRA Shoes– 133,000 miles per turning**
- **Wheel life with cast-iron shoes– 77,000 miles per turning**

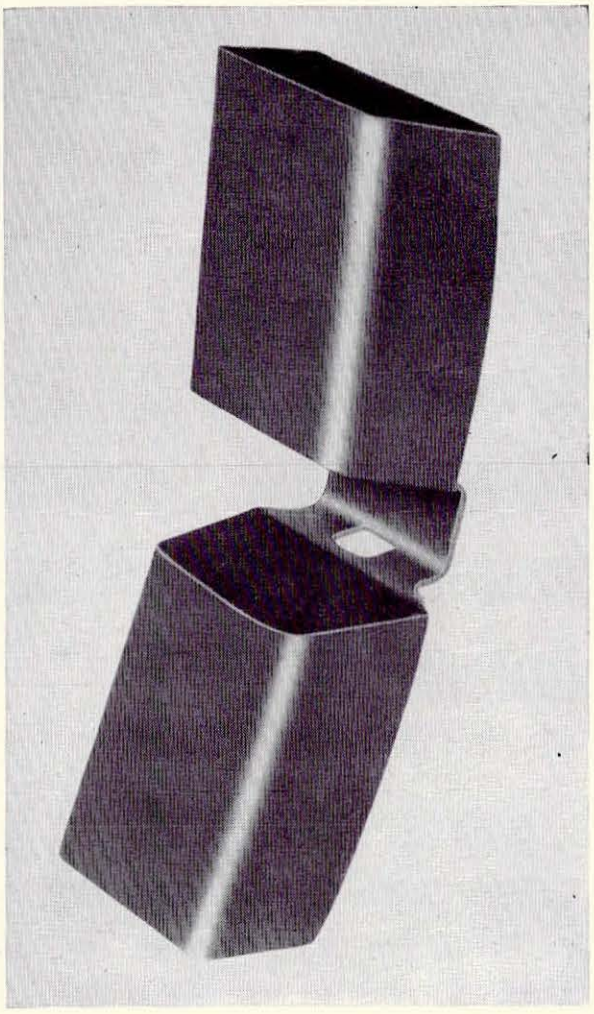
The excellent mileage of COBRA Shoes and the increase in wheel mileage between turnings, revealed dramatically by this train operation, produce these outstanding savings:

Yearly brake shoe savings per car $1088.00

***Yearly wheel savings per car . . . 666.00**

Total savings per car per year . . 1754.00

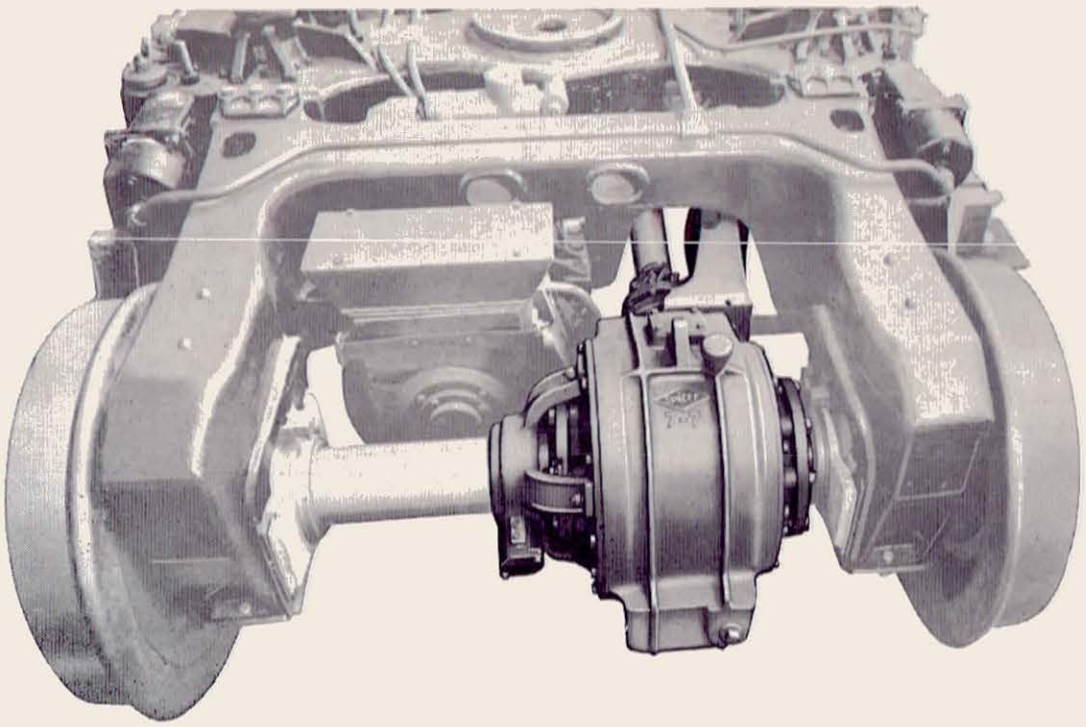
**Wheel savings based on wheel changes specified by Rules 21 and 22, and Rules 101 and 105, A.A.R. Code of Rule for interchanges of traffic, effective January 1, 1963.*



Make this inexpensive test on any suburban or passenger train. Equip an entire train with COBRA Shoes. Keep accurate records of brake-shoe costs and wheel-turning costs. Compare them with present costs. You'll find that COBRA Shoes are one of the best possible investments you can make for quick return and continuing savings.

RAILROAD FRICTION PRODUCTS CORPORATION • Wilmerding, Pennsylvania

JOHNS-MANVILLE CORPORATION, Specialists in Friction Materials



SPICER TRACTION DRIVES *(MODEL 7-7)* POWER NEW SUBWAY CARS FOR TORONTO TRANSIT COMMISSION

As North America's leading manufacturer of Traction Motor Drives—Spicer has more operator-proven experience in right angle drives on main line railroads, suburban railroads, and rapid transit cars than *all other manufacturers combined.*

Over 21,000 units are now in operation in these applications alone.

For Full Particulars, Contact:

Spicer (Model 7-7) Traction Motor Drives offer innovations that provide seven specific benefits to rapid transit car users:

1. **NO FIELD ADJUSTMENT NECESSARY**
2. **FULL CUSHION MOUNTING**
3. **POSITIVE, SLIP-FREE DRIVE**
4. **LARGER RING GEAR**
5. **LESS PINION OFFSET**
6. **INCREASED OIL CAPACITY**
7. **LOAD TESTED AT FACTORY**

SEVEN GOOD REASONS TO SPECIFY SPICER!

DANA Spicer **DANA CORPORATION** Toledo 1, Ohio

IN CANADA, contact The HOLDEN COMPANY, LTD.
614 St. James St., W., Montreal 3, Quebec

RAILROADING AFTER HOURS WITH JIM LYNE

LYNE

TRAIN-RIDING AND SELLING—Sales Management magazine has recently put out a piece of sales propaganda to show how sales-minded its editors are. This particular editor was trying to get an interview with a du Pont executive, who had no time to spare. The nosy editor found out, though, that the busy executive made a New York-Wilmington, Del., train trip every week, and he got a 2½-hour interview by the simple device of riding the train with the executive on one of these trips.

He wouldn't have had time for an interview if the subject had been flying. There is a world of travel business coming the railroads' way (in my always optimistic opinion) just as soon as the advantages of medium-distance train riding get a fraction of the promotional attention from the powers that be that air travel gets. Flying is all right (1) if the distance is great, (2) if you're in a necessary hurry, (3) if you're willing to take the risk, and (4) if acceptable train service isn't available. But planes can effectively replace passenger trains only in part.

I believe the nation needs, within the government, an efficient railway bureau —to give voice (in the public interest) to proper national concern for efficient railway service (and government policies to make such service possible). Air, water and highway transportation are well taken care of in this respect within the government and the railroads will be the 13th pig (see next paragraph) until they are similarly represented.

RAILROADS, THE THIRTEENTH PIG—I asked a kindly disposed railroad president the other day if he knew how many maternal faucets were available for provisioning a litter of pigs. After checking with his agricultural development people he came up with the answer—the number varies, but it is usually a dozen. Thus, if there are thirteen pigs in a typical litter, No. 13 is likely to get somewhat less than his fair share of sustenance. I am an advocate for a square deal for the thirteenth pig in the transportation business, viz., the railroads.

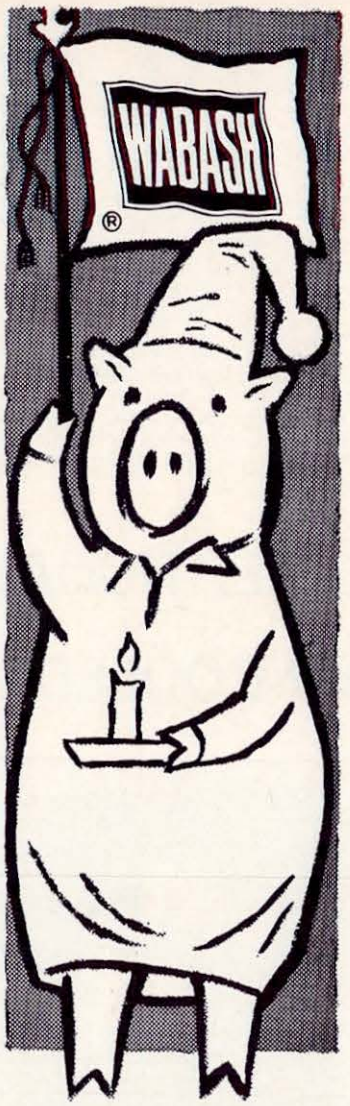
THEY WANT TO GO RAILROADING—At a recent hobnob I heard some talk by fellows near the center of management-trainee recruiting on two widely separated railroads. They said they are getting unsolicited applications from able young men who want to become railroaders. They interpret this to mean that word is getting around that the old "static" label, as applied to railroads, is a thing of the past. Alert youngsters have found out that there are opportuniities in this industry and are reaching in to grasp them.

REDUCED SENIORITY ROSTERS—Not to press too hard or too frequently the notion I have in favor of reducing seniority rosters—I nevertheless believe I should pass along information I have from a large railroad that is getting ready to reduce switchmen's rosters from 57 to 2.

Flexibility in the face of rapid change is one of the most serious problems of railroad managements and employees alike. Reducing the number of seniority rosters is one means toward adaptation to change—by transferring available men to the places where there are openings. Programs of education of employees in declining occupations, to qualify them for jobs where recruits are needed, would be another approach.

FRILL-FREE TRANSPORTATION—This is the happy term being applied to simple hauling of freight from here to there. No "transit" services. No setting out to partially load or unload. No excess switching for weighing and inspection. No "follow lot" cars. No "free time." In short, frill-free transportation.

The economies of such transportation would be shared by both carrier and customer, the latter being assigned a generous proportion to pay him to forego these costly frills. The faster such attractively low-cost service is extended on the railroads the sooner railroading will become a growing and more profitable business. (Such, anyhow, is one man's opinion—and, so far, available evidence appears to support the belief.)



In the "HEART OF AMERICA" overnight Piggy-Back delivery via

WABASH CANNON BALL
FREIGHT · SERVICE

Wabash Railroad Co.
SERVING THE "HEART OF AMERICA"

PEOPLE IN THE NEWS

ASSOCIATION OF AMERICAN RAILROADS.—Fred G. Seig, assistant to vice president, Washington, D.C., retires May 31, after over 40 years of railroad service.

A. F. Grassmuck appointed military assistant to the chief inspector, Bureau of Explosives of the AAR, which is headquartered in New York and has a chemical laboratory in South Amboy, N.J. For several years Mr. Grassmuck has been working with the military, affiliated contractors and the nation's railroads in the development and testing of shipping techniques to insure safe transportation of explosives and other dangerous articles, missiles, radioactive materials and hazardous chemicals.

ATLANTIC COAST LINE.—J. T. Jones appointed district sales manager, St. Louis, Mo.

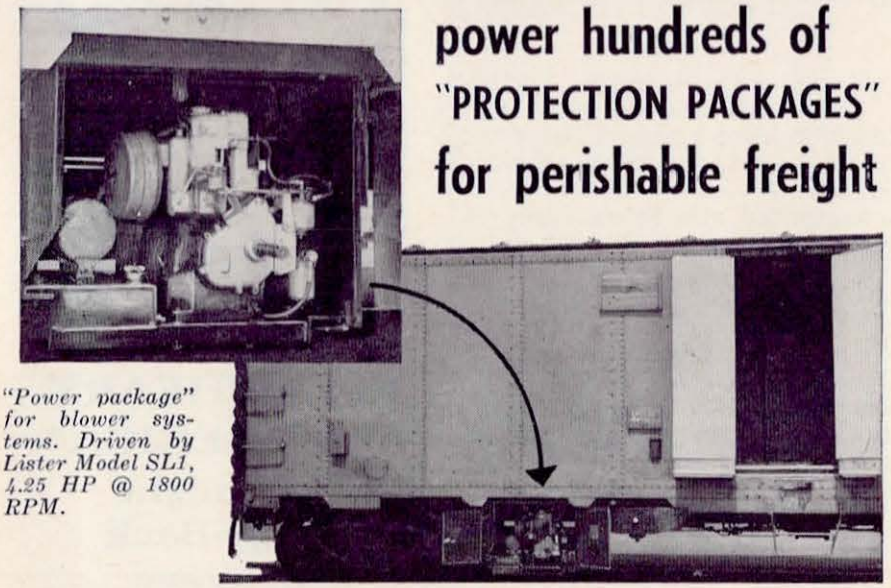
CANADIAN NATIONAL.—John C. Gardiner, manager of freight sales development, Montreal, appointed freight sales manager, Great Lakes Region, Toronto, Ont., succeeding **E. Ross Dalrymple,** retired after 40 years' service.

John M. Docherty passenger sales representative, London Area, promoted to branch manager, passenger sales, Kitchener, Ont. **Harry Sharp,** branch manager, Brantford, and **Thomas D. Mellon,** special traffic clerk, London Area, appointed passenger sales representatives at Kitchener and London, respectively.

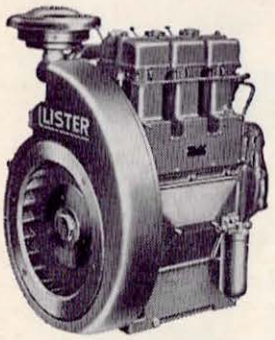
EXCEPTIONALLY ECONOMICAL

AIR-COOLED Lister DIESELS

power hundreds of "PROTECTION PACKAGES" for perishable freight



"Power package" for blower systems. Driven by Lister Model SL1, 4.25 HP @ 1800 RPM.



Power-plus for mechanical refrigeration systems. Lister Model HA3, 33 HP @ 1800 RPM.

PLENTIFUL, DEPENDABLE, LOW-COST KW OUTPUT ranging from 500 to 15,000 watts is provided as dictated by protection requirements for a wide variety of perishable freight. Coast-to-coast, Lister diesels are delivering perfect performance in in-car refrigeration and blower systems. Performance outstanding for its remarkable relief from servicing costs and worries.

Lister's superior design and superb manufacture incorporate but few moving parts, assure *quicksure starting* regardless of weather or climate. Write for data on these exceptional, air-cooled engines. We will be pleased to provide revealing performance data and to submit recommendations.

LISTER-BLACKSTONE, INC.

34-24 56th Street, Woodside 77, N. Y. Tel.: Twining 8-6244

In Canada: Canadian Lister-Blackstone, Ltd., 137 Wellington St. W., Toronto 1, Ont.

Walter Scott, assistant superintendent of transportation, Toronto Area, retires May 31.

N. A. Dougall, personnel assistant, Toronto, appointed employee relations supervisor, Capreol, Ont., succeeding **L. E. McFarland,** transferred.

CENTRAL OF GEORGIA.—M. R. Way appointed general freight agent—sales, Savannah, Ga. Abolished position of assistant to general freight traffic manager. **E. G. Dodd** appointed assistant to general freight agent, Savannah.

CHESAPEAKE & OHIO.—P. D. Hulbert appointed supervisor station service, Richmond, Va., succeeding **R. J. Picklesimer,** who had headquarters at Clifton Forge, Va., prior to his recent promotion.

ERIE-LACKAWANNA.—Robert A. Johnson, district passenger sales representative, Chicago, promoted to district passenger sales manager there.

Raymond A. Carroll, former eastern railroad member, National Railroad Adjustment Board, Chicago, appointed assistant director of labor relations, E-L, Cleveland.

GULF, COLORADO & SANTA FE.—J. H. Cherry, right of way agent, Galveston, Tex., advanced to office engineer there, to replace **H. P. Weidman,** transferred.

ILLINOIS TERMINAL.—The Chicago agency's new address is: Room 1265, Marquette Building, 140 South Dearborn Street, Chicago 3, Ill.

MISSOURI PACIFIC.—H. D. Huffman named assistant superintendent, Central division, Coffeyville, Kans.

NEW HAVEN.—Carl O. Rosenvik, auditor of capital expenditures, appointed auditor of expenditures. **DeForest C. Dupee,** accountant, disbursements office, appointed assistant auditor of expenditures. Mr. Rosenvik assumes the duties of the late **George J. Crosby,** auditor of disbursements The appointments effect a consolidation of the supervision of capital expenditures and disbursements.

NEW YORK CENTRAL.—Howard L. Porter, assistant comptroller, appointed to the new position of director of computer services, New York.

Donald O. Eisele, senior industrial engineer, New York, appointed district industrial engineer, with responsibility for all industrial engineering projects in the New York area. One of these involves a study of commuter service improvements on the Upper Harlem Division, which is being undertaken in conjunction with the Tri-State Transportation Committee as a Federal Mass Transportation Demonstration Project.

R. V. Kinch promoted to district claim agent, Columbus, Ohio, succeeding **C. W. Garman,** transferred to Indianapolis, Ind., to replace the late **C. G. McCreary.**

NORFOLK & WESTERN.—George T. Strong, Jr., master mechanic, New River division, Princeton, W. Va., appointed to the new position of chief air brake inspector, Roanoke. **Robert G. Bennett, Jr.,** Princeton shop superintendent, named master mechanic there. **William B. Tanner,** assistant general air brake inspector, appointed assistant trainmaster, Shenandoah division, succeeding **Joseph R. Richardson,** transferred to the Radford division, Roanoke, to replace the late **W. R. Jackson.**

NORFOLK SOUTHERN.—G. W. Teeter appointed assistant to general superintendent, Raleigh, N.C.

Deodat Clejan
GATC

Peter J. Wolf
Poor & Co.

PENNSYLVANIA.—L. Stanley Crane, assistant chief mechanical officer, **Southern,** Washington, D.C., appointed director of industrial engineering, PRR, Philadelphia.

PORT HURON & DETROIT.—John F. Levin, general freight agent, Port Huron, Mich., elected vice president—sales. **William T. Frazier,** superintendent, elected vice president—operations.

READING.—Augustin J. Schwartz, Jr., appointed sales manager, TOFC service and Reading Transportation Co., at 611 Reading Terminal, Philadelphia 7, Pa.

SOO LINE.—Irving L. Fardal, chief of the investigation and protection department, appointed superintendent of less-than-carload and piggyback freight operations.

SOUTHERN PACIFIC.—Thomas C. Buckley, public relations representative, Los Angeles, Calif., promoted to assistant public relations manager there. **Donald P. Everberg,** who has been assigned to the public relations department at San Francisco, succeeds Mr. Buckley at Los Angeles.

TERMINAL RAILROAD ASSN. OF ST. LOUIS.—George C. Siebert named superintendent of passenger terminal operations.

UNION PACIFIC.—Roy B. Johnson, general passenger agent, Omaha, named assistant passenger traffic manager there. **Gerald I. Giles,** assistant general passenger agent, Omaha, replaces Mr. Johnson. **June M. Forsha,** assistant to the general passenger traffic manager, and **Daniel P. McMahon,** chief of the rate and tariff bureau, appointed assistant general passenger agents, Omaha.

Supply Trade

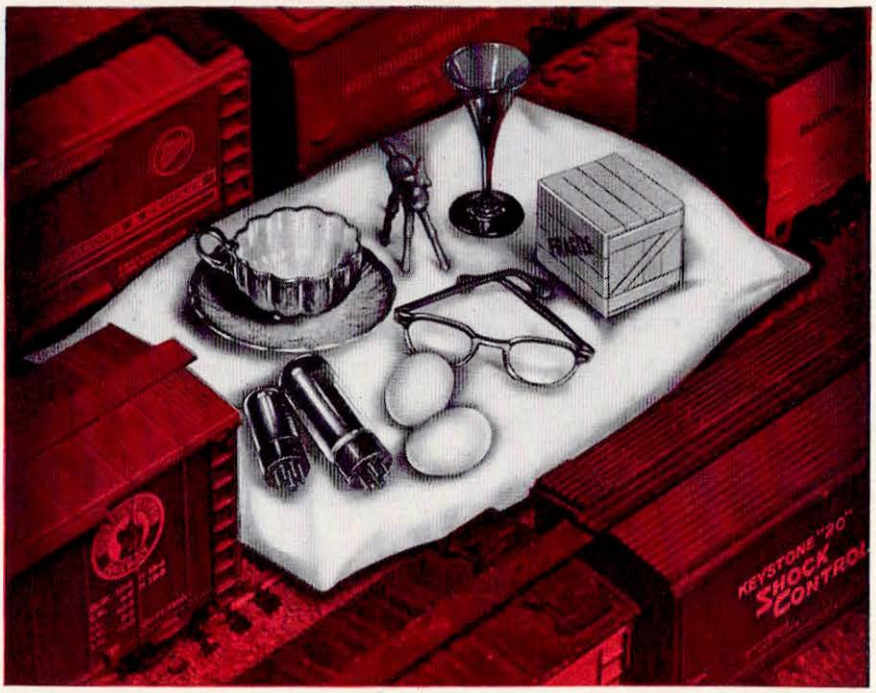
Deodat Clejan, manager of the piggyback department, Freight Car Division, **General American Transportation Corp.,** has been appointed director of transportation planning.

Peter J. Wolf has been named western sales manager, Railway Products Division, **Poor & Co.,** to succeed **John E. Mahoney,** who retired April 30 (RA, May 20, p. 48).

Robert V. Simpson has been appointed sales engineer, Symington division, **Symington Wayne Corp.,** Philadelphia, Pa. Mr. Simpson was formerly sales engineer, Railroad Specialties, Birdsboro Corp.

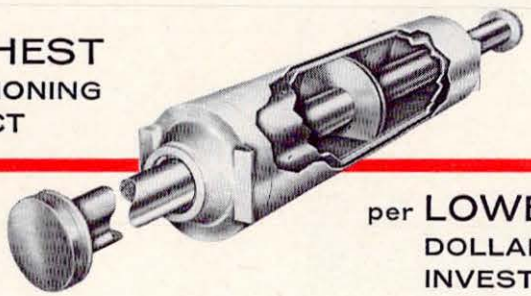
Cleveland Graphite Bronze, Division of Clevite Corp., Cleveland, Ohio, has appointed the following agencies as representatives to railroads: **Leo F. Duffy & Associates,** Chicago; **Frank B. Nugent Co.,** St. Paul, Minn.; **Consolidated Equipment Co., Ltd.,** Montreal, Que.,

Like shipping your goods on a pillow . . .



KEYSTONE SHOCK CONTROL
gives you

HIGHEST
CUSHIONING
EFFECT



per LOWEST
DOLLAR
INVESTMENT

Over 400 new freight cars equipped with Keystone SHOCK CONTROL will start rolling next month. These cars added to over 3000 already in use are positive proof of the effectiveness of Keystone's SHOCK CONTROL System.

Railroads, shippers and receivers alike have found through experience that freight cars equipped with Keystone SHOCK CONTROL deliver their goods in first class condition—eliminate the major problem of freight loss and damage claims.

Here's an investment that will pay for itself and provide you a bonus of customer good will.

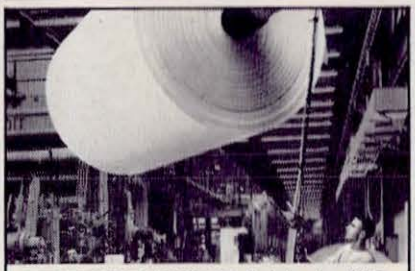
If you're interested in safer, more effective protection for your cars and cargoes, make certain you hear the Keystone SHOCK CONTROL story.

Write for complete information and specifications.

KEYSTONE RAILWAY EQUIPMENT COMPANY
Dept. B 310 S. Michigan Ave. Chicago 4, Illinois

In Canada: International Equipment Company Limited
6205 Cote de Liesse Road, Montreal 9, Quebec

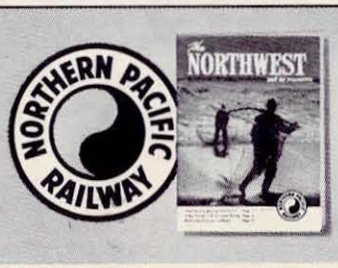
Business is booming in the great Northwest



WEYERHAEUSER CO. finished a $10 million expansion of the paperboard phase of its highly integrated operations at Longview, Washington.

CARGILL, INC., of Minneapolis is marketing Formula 1308, a new linseed-oil-and-water emulsion paint base, made from North Dakota flax.

CROWN ZELLERBACH CORPORATION has started production of plywood from its new 125,000 sq. ft. plant at St. Helens, Oregon.



NORTHWEST magazine tells about the area and its resources. Write for your free copy.

NORTHERN PACIFIC RAILWAY invites you to look into the opportunities available from Minnesota to Washington. Write P. D. Edgell, Mgr., Properties and Industrial Development, Northern Pacific Railway, St. Paul 1, Minnesota.

Canada; **McLean & Son,** Wynnewood, Pa.; **W. R. Pittman & Associates,** Fullerton, Calif.; **T. F. Going,** Louisville, Ky.; **Messrs. Sam Goodloe & Goodloe Saunders,** Richmond, Va.; and **Carriers Supply Co.,** St. Louis, Mo.

Roy A. Robichaud, railway finishes sales representative for **E. I. du Pont de Nemours & Co.** in the Southeast, at Atlanta, Ga., has been named assistant products manager for industrial maintenance sales, Wilmington, Del. **Earl G. Syfert,** a chemist who has specialized in the formulation of railway finishes at the Chicago finishes plant, will succeed Mr. Robichaud in Atlanta.

William C. Irish has been appointed district sales manager at New York for **Scullin Steel Co.,** division of **Universal Marion Corp. Torsten H. Parke** retired as vice president, New York, but will continue as a consultant in the New York office.

Ford-Lynch Associates, Atlanta, Ga., named sales representative in the Southeastern territory for **Union Railway Equipment Co.**

George H. Tienken has been appointed manager of a newly opened Southeast sales district office, Shippers' Car Line division of **ACF Industries, Inc.,** at Lenox Towers, West, 3390 Peachtree Road, N.E., Atlanta, Ga.

Bert S. Cross has been elected president, **3 M Company,** succeeding **Herbert P. Buetow,** retired.

Industrial Traffic

George R. Voges has been appointed assistant to traffic manager, **International Nickel Co.,** New York. Mr. Voges has been on the Traffic department staff since 1936.

Harry D. Gobrecht, assistant to vice president—traffic, **United States Gypsum Co.,** Chicago, has been named assistant general traffic manager. **Roy W. Dahlberg,** assistant traffic manager—rail, has been named Midwestern traffic manager.

Edmund A. Senghas, administrative assistant to **E. F. Mundy,** vice president for traffic, **National Biscuit Co.,** will retire May 31. **Thomas L. Steele** has been appointed staff assistant to vice president. **Thomas D. Rose** has been named manager, Transportation division (previously called the Rate division) and **Edward C. Everett** has been named assistant manager.

OBITUARY

George L. Bryson, 74, who retired in 1953 as passenger traffic manager, **Grand Trunk-Canadian National,** Chicago, died April 30 at his home in Harrodsburg, Ky.

Walter B. McGrath, 66, retired assistant general storekeeper, **Pullman Co.,** died May 6 at his home in Chicago.

LeRoy Morris, Sr., 74, who retired in March 1961 as traffic manager, **Mississippi Central,** died May 12 after a brief illness.

Francis R. Mullen, 89, retired general manager, Lines West, **Burlington,** died recently at Lincoln, Neb.

Harold F. Whitmore, 72, retired chief engineer, **Nickel Plate,** Cleveland, died May 1 at Little Valley, N.Y.

Dividends Declared

ATCHISON, TOPEKA & SANTA FE.—30¢, quarterly, payable June 1 to holders of record April 26.

ATLANTIC COAST LINE.—50¢, quarterly, payable June 12 to holders of record May 3.

BANGOR & AROOSTOOK.—12½¢, quarterly, payable June 28 to holders of record June 14.

CAROLINA, CLINCHFIELD & OHIO.—$1.25, quarterly, paid April 19 to holders of record April 9.

CHESAPEAKE & OHIO.—$1, quarterly, payable June 20 to holders of record June 3; preferred, 87½¢, quarterly, payable Aug. 1 to holders of record July 5.

CLEVELAND & PITTSBURGH.—7% guaranteed, 87½¢, quarterly; special guaranteed, 50¢, quarterly, both payable June 3 to holders of record May 10.

GREAT NORTHERN.—75¢, quarterly, paid May 1 to holders of record April 9.

LOUISVILLE & NASHVILLE.—75¢, quarterly, payable June 12 to holders of record May 10.

MAINE CENTRAL.—5% preferred, $1.25 (arrears), paid May 18 to holders of record June 1.

NORFOLK & WESTERN.—4% adj. preferred, 25¢, quarterly, paid May 10 to holders of record April 18; $1.25, quarterly, payable June 10 to holders of record May 9.

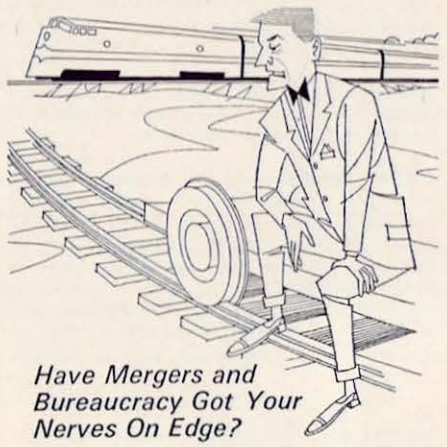
SOUTHERN PACIFIC.—35¢, quarterly, payable June 17 to holders of record May 27.

UNITED NEW JERSEY RR & CANAL.—$2.50, quarterly, paid April 10 to holders of record March 20.

WESTERN MARYLAND.—25¢, quarterly; 4% preferred, 40¢, quarterly; 7% preferred, 70¢, quarterly; 5% preferred, 15¢, quarterly, all paid March 29 to holders of record March 19.

WESTERN PACIFIC.—5% stock dividend, paid April 3 to holders of record March 8; 25¢, quarterly, paid May 15 to holders of record May 1.

WHEELING & LAKE ERIE.—common, $1.4375, quarterly; Prior Lien, $1, quarterly, both paid May 1 to holders of record April 5.



Have Mergers and Bureaucracy Got Your Nerves On Edge?

Time To Take a "TENSION BREAK!"

You need to relax in the warm embrace of world-famous Hot Springs thermal waters. A course of Whirlpool Baths, followed by expert massage, will quiet those jangled nerves and relieve the pain and misery of occupational fatigue. You'll feel GOOD again!

Write, wire or call
EDGAR A. MAY, Manager
107 Central Avenue

THE Arlington
HOTEL and BATHS
HOT SPRINGS NATIONAL PARK, ARKANSAS

Why not hold your next sales meeting at The Arlington? Complete facilities for any size group.

Trailer Train members deliver piggyback shipments with top speed and unusual care.

How do they do it?

They use the most expeditious routes and the most efficient equipment—modern, king-size, roller-bearing flatcars that can load two giant trailers in a matter of minutes.

Trailer Train owns and provides its members with almost 14,000 of these cars.

For more information on this modern way of shipping, contact any of the companies listed here.

USE PIGGYBACK SERVICE! THESE TRAILER TRAIN MEMBERS PROVIDE THE BEST!

Atlantic Coast Line
Baltimore & Ohio
Boston & Maine
Burlington
Central of Georgia
Chesapeake & Ohio
Chicago Great Western
Chicago & North Western
Cotton Belt
D. T. & I.
Frisco
Great Northern
Gulf, Mobile & Ohio
Illinois Central
Kansas City Southern
Louisville & Nashville
Milwaukee Road
Missouri-Kansas-Texas
Missouri Pacific
Nickel Plate
Norfolk & Western
Northern Pacific
Pennsylvania
Reading
Richmond, Fredericksburg and Potomac
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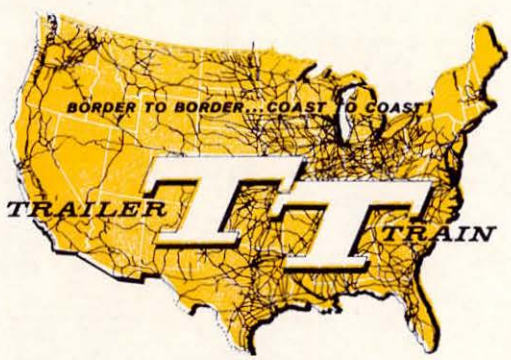
Texas & Pacific
Union Pacific
United States Freight
Wabash
Western Pacific



6 Penn Center Plaza • Philadelphia 3, Pa.

Another report on railroad progress from American Oil Company

To make commuting pay
NORTH WESTERN blends new trains

Now in its seventh year, North Western's program of commuter service modernization is still making headlines—*and progress!* The 1963 equipment order adds more units to the still-new fleet of 200 air-conditioned, bi-level coaches. It also adds 1.6 million to the total of more than 43 million dollars already spent on the program.

To reduce costs and attract more passengers, North Western is using new ideas as well as new equipment: The push-pull train to eliminate switching and turn-around, flash tickets instead of punch-type, off-peak service at the same time every hour, tickets mailed monthly and umbrella loans on rainy days.

No other commuter system of this size—80,000 passengers per day—offers so much comfort and convenience. But North Western doesn't wait for suburbanites to beat a path to its sliding steel coach doors. It uses newspaper, radio, television and direct mail reminders. And on the trains, folders and leaflets distributed to inform C&NW commuters often urge them to "sell" the service to friends and neighbors. In addition to all this, North Western has earned many local and national headlines with the scope of its modernization and the news value of such innovations as "shuttle boats" on the Chicago River (supplementing bus service in Chicago's Loop).

Today, after being hurt by new expressways and helped by abandonment of the competing North Shore Line, the C&NW is studying the po-

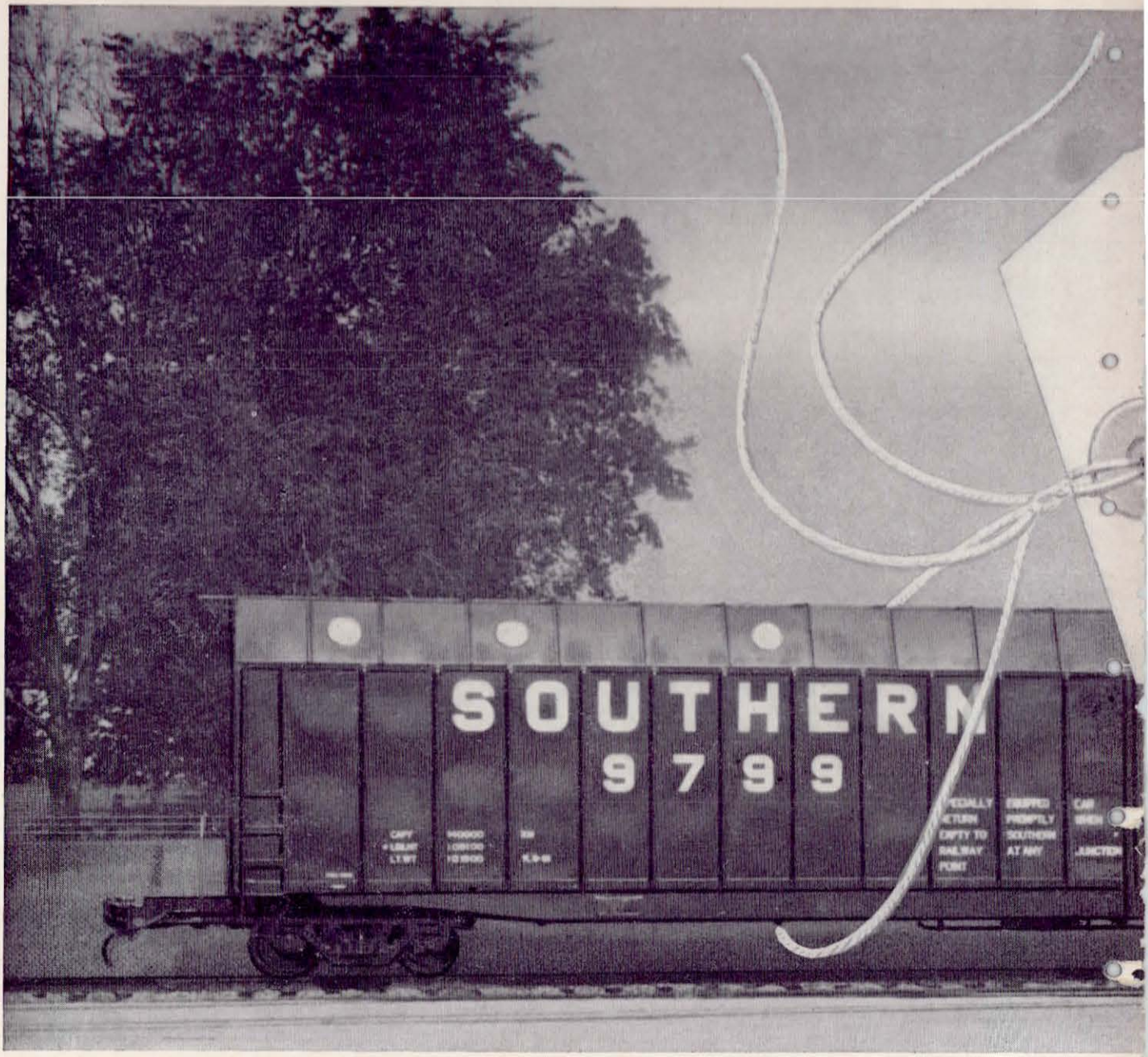
with new ideas

tential of inter-suburb traffic as industry moves out from the city . . . off-peak bargain fares . . . better connecting bus service and more parking space for train commuters.

This outstanding commuter service is just part of the progress being made by North Western's creative management. The C&NW is another of the many progressive railroads served by American Oil Company, supplier of petroleum products backed by technical assistance and research.

AMERICAN

AMERICAN OIL COMPANY
910 S. Michigan Avenue
Chicago 80, Illinois



Our "Big Boy" box car

WE call it "BIG BOY" because it *is* big – the largest box car, we believe, ever built for regular service on any railroad in the world. Why so big? So it can haul more freight at *less* cost. So it can save money for *you!*

"BIG BOY" is only one of our ever-growing *big fleet* – the largest in the South – of new, cost-cutting special-purpose freight cars. Most of them were developed by Southern. In the past few years we have spent hundreds of millions of dollars for new customer-tailored freight cars, new diesel engines, modern electronic yards and for other cost-cutting equipment and improvements. We try to share with you the savings in cost that result from our improved railroad technology. But our efforts to lower our freight prices are often blocked by outmoded, discriminatory regulation.

Shippers will save huge sums of money with the enactment of President Kennedy's reduced freight rates legislation (commonly

saves you money!

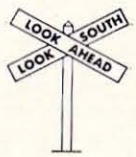
called "minimum rates" legislation) now before Congress. All common carriers—rail, highway and waterway—will have freedom to reduce rates on agricultural products and bulk commodities such as coal, grain, sand, gravel, salt and sugar.

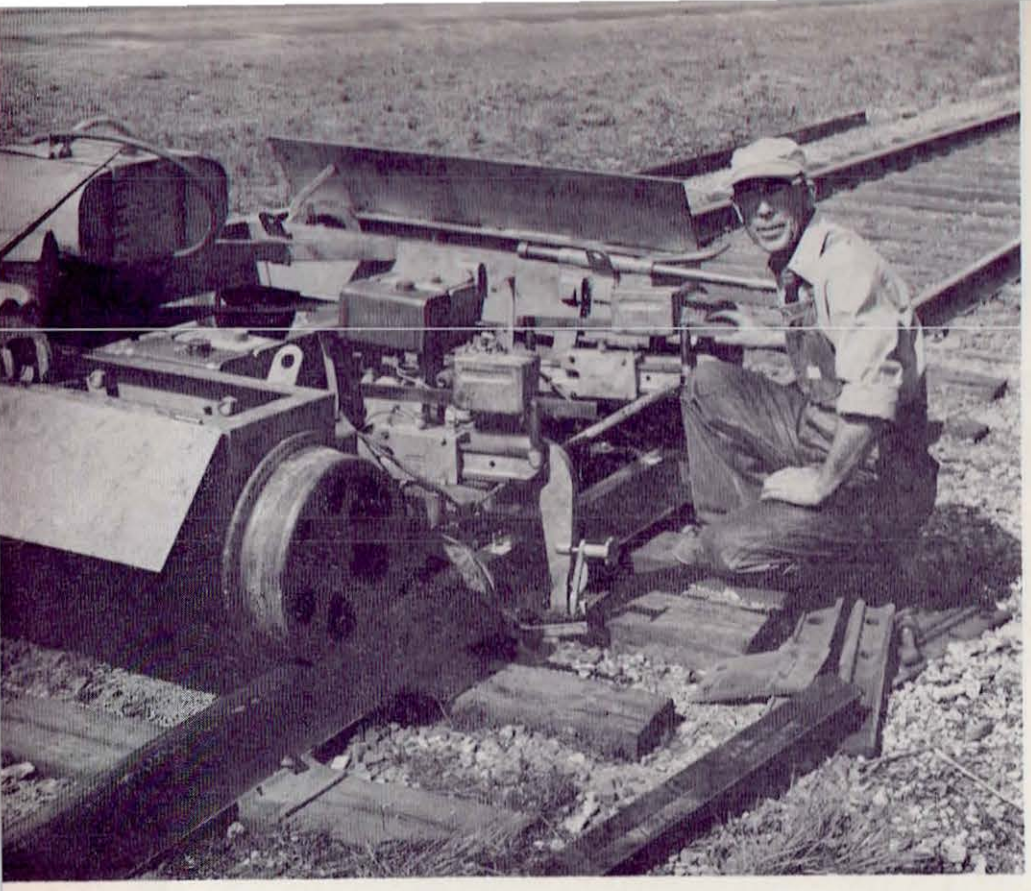
This will help lower your transportation costs. Small shippers in particular will be helped because this is "small shipper" legislation that will give them the same advantages large shippers now have.

In the national interest—in *your* pocketbook interest – write your Congressman to support H.R. 4700 and your Senators to support S. 1061. This reduced freight rates legislation can help lower transportation costs by several billion dollars each year.

SOUTHERN RAILWAY SYSTEM

WASHINGTON, D.C. *"SOUTHERN'S ACCENT IS ON YOU!"*





BOTH RAIL ENDS are cut off simultaneously with the Frisco's sawing unit. The cuts, made 15 inches from the rail ends, are positioned with reference to the new bolt holes previously drilled in the rails.

Frisco Develops Rail-Cropping Units

Equipment made in the railroad's shops for cutting off rail ends in the track includes a carriage mounting two power hack saws and an ingenious winch for pulling cropped rails together.

Equipment developed by the Frisco's own forces is being used to good advantage, say the railroad's officers, in cropping rails in track. The equipment includes a track-mounted unit carrying two power hack saws for cutting the ends off the rails, and a winch for pulling the cropped rails together to form new joints. The ingenious feature of the winch is that it may be operated directly by the chuck of a power track wrench.

Cropping rails in track is itself a new practice on the Frisco. Formerly, rails that had become badly worn at the ends were removed from track and shipped to Springfield, Mo., for reconditioning, an operation that involved cropping the ends from them.

● **Five basic steps.** The operation of cutting the ends from rails in track, as developed on the Frisco, involves five basic steps: (1) drilling new bolt holes in the rails; (2) removing the old angle bars; (3) cutting off the rail ends; (4) pulling the rails together to make new joints; and (5) bolting up the new joints.

The unit that was developed for sawing off the rail ends incorporates two Racine power hack saws. The bases of the saws were removed and each saw was mounted on a separate base plate. The plates were mounted on a sliding track in such a manner that they can be spread apart or brought closer together to compensate for variations in the rail drilling and joint gaps in existing track. By means of a device attached to the plates they may be positioned with reference to the holes drilled in the rails in step No. 1. The saws are then in the proper positions to make the cuts in the rails.

The saws and plates are mounted on a carriage with flanged wheels so that they can be moved from joint to joint. By means of a hand-operated winch mounted on the carriage, the plates and saws can be raised to clear road crossings and set-offs. A 10-gallon tank on the carriage contains coolant for the saw blades, the coolant being piped to the smaller tanks on the saws by gravity flow.

● **How the winch works.** The winch developed for pulling the rails together rolls on the rail and may be quickly fastened to the ball of the rail. It has a drum on which is wound 60 feet of ⅜-inch cable. To each end of the axle of the winch drum a nut for a track bolt is welded. A Nordberg power wrench is used to activate the winch by simply placing the chuck on one of the nuts on the axle of the drum. It is explained that a Nordberg wrench is used because the angle of the working head allows proper fit of the chucks on the nuts. Also, this machine is equipped with a reversible outrigger that allows it to operate on either rail in the same direction.

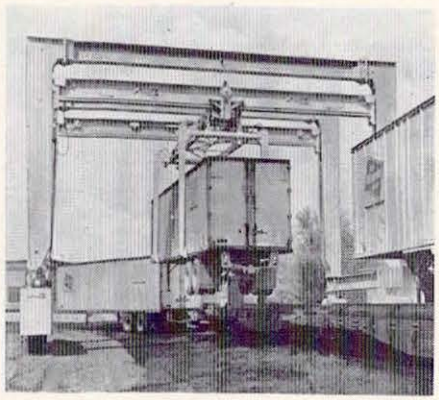
In the cropping operation, drilling of the new bolt holes (step No. 1) is performed with two small Nordberg power drills. Proper spacing of the holes is achieved with the aid of drilling templates held securely in place in the web and fishing areas of the rail by a "C" clamp. This clamp, also made on the Frisco, is placed quickly by hand and holds the template in position under spring tension. When the new bolt holes have been drilled, the track bolts on the old bars are removed (step No. 2) by a Raco bolting machine.

After the bars have been removed, the cutting saws are positioned over the joint and a cut made 15 inches from each rail end (step No. 3).

● **Steel nose skid is used.** As an aid in pulling the rails together (step No. 4), a steel nose skid is attached to the rail to guide it through the spikes and over the tie plates, the rail anchors having been previously removed as necessary. Thus, the need to pull or remove all the spikes and redrive them is eliminated. The bolting up of the new joints (step No. 5) is done with the aid of the same Nordberg wrench that is used to operate the winch.

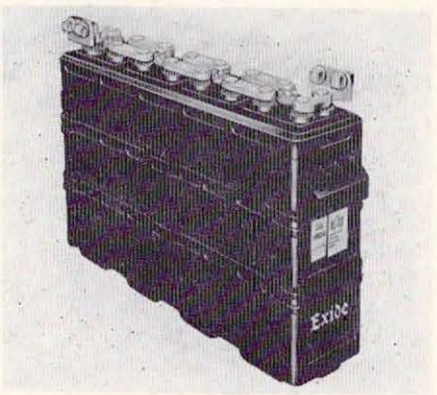
Frisco engineers estimate that about 17 track-miles of rail can be reconditioned in a year by a crew using this method. An additional sawing unit is now being constructed and it is estimated that the operation will be speeded up about 50% when this unit is placed in use.

NEW PRODUCTS REPORT



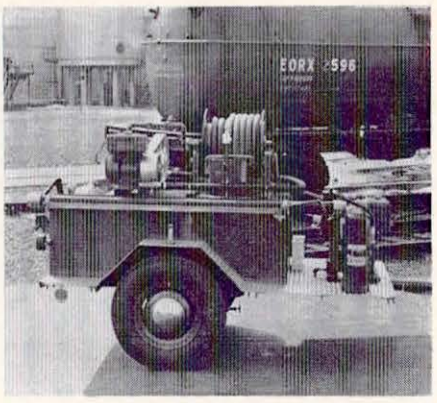
Traveling Cranes (RA-1)

The speeds of the 60,000- and 80,000-lb capacity Travelifts added to the Drott line have been more than tripled. Two-speed transmission delivers high power at low hook speeds for heavy loads and at high hook speeds for lighter work. With 90-deg rear wheel steering, a crane can be pivoted on either front wheel. Combinations of widths, heights and lengths may be had to fit a variety of loading and unloading operations. *Drott Manufacturing Corp.*



Locomotive Battery (RA-2)

Extra capacity for delivering the high current needed to start diesel locomotives is embodied in the MS Exide-Iron clad battery. The tubes of the positive plates are square shaped, and the tubing is more highly porous. Electrical sizes are 280 and 420 amp-hr, both at the 8-hr rate, with electrolyte specific gravity of 1.250 at 77 deg F. At the 1½-min cranking rate at 32 deg F, the MS-280 will deliver 900 amp; the MS-420, some 1,350 amp. *Electric Storage Battery Co.*



Oil Spill Control Unit (RA-3)

The Chem-Cart is a mobile unit designed to eliminate pollution problems caused by oil and chemical spills. It carries all components and chemicals needed in emergencies. Its tank holds 150 gallons of oil-dispersing chemical solution. Provision is a!so made for pumping chemical from nearby drums when needed to combat large spills. The unit can be had with wheels and hitch, or on skids. When fully loaded, it can be moved by two men. *Magnus Chemical Co.*

Refuse Removal (RA-4)

A stationary compactor, installed as part of a loading dock without alteration of existing plant facilities, is the heart of the Anchorpac, a refuse removal system which requires no separation of trash or scrap. Systems of up to 450 cu-yd-per-hr capacity are said to save up to 50% over other systems. The unit exerts over 90,000 lb of ram pressure, crushing and compacting refuse into high-pressure detachable containers of from 32- to 80-cu-yd capacity. *Tri-City Equipment Co.*

Photocopy Unit (RA-5)

A new photocopy unit is said to combine one-step operation with a unique handling procedure. The new unit, called the APECO "Systematic," completely eliminates handling of the developer solution while giving the user efficient and convenient one-step operation, feeding the original, positive and negative into the unit in one step. The compact unit—21 in. wide, 13 in. deep and 6 in. high—costs $423.50. *American Photocopy Equipment Co.*

Car Liner Kits (RA-6)

PlyVeneer car liner consists of ⅛-in. Douglas fir core with 42-lb linerboard bonded to both sides. The material can be stapled or nailed anywhere on its surface, and it can be used to cover voids up to two feet. PlyVeneer car liner kits are now being used by several railroads (one of which has ordered 475 kits for 40- and 50-ft box cars) and are being tested by other railroads. *Car Liner Division, Macomb Wholesale Lumber Co.*

RAILWAY AGE WEEKLY

30 Church Street, N.Y. 7, N.Y. READERS' SERVICE DEPT. (Att. George Johnson)

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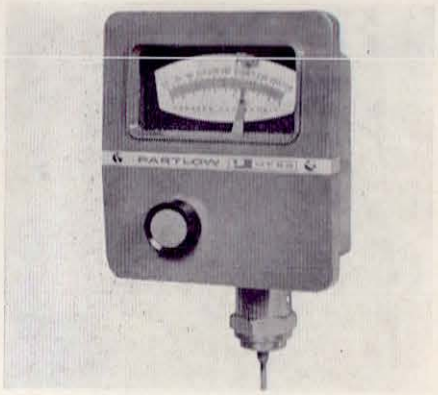
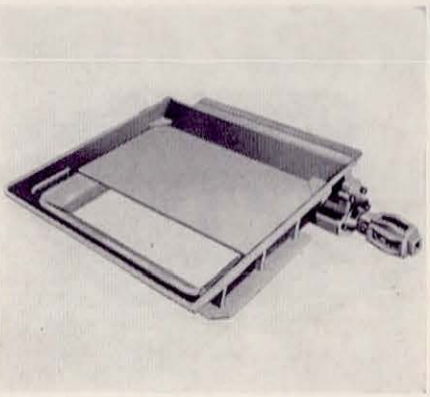
NEW PRODUCTS REPORT



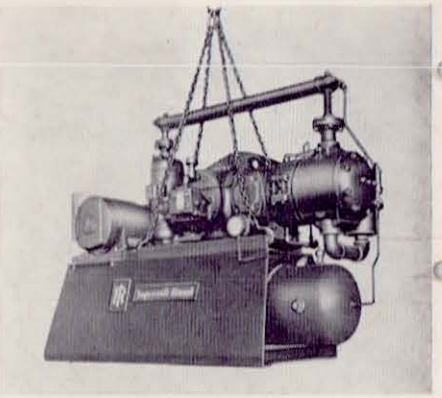
Temperature Controller (RA-7)

Three-wire switches with equal differential within each switch are employed in the Model MFSS two-switch indicating temperature controller which is said to be especially suitable for applications requiring control of both heating and refrigeration. The control has a mercury-filled sensing element with a piston-type mercury seal, and the scale is linear. Two-wire switches and a cam-actuated cutout switch are optional. *Partlow Corp.*



Discharge Gate (RA-8)

Fast, trouble-free, one-man use, under all weather conditions, is the feature of the power-geared discharge gate for 8 and 11 in. rail clearance. Opening power is said to be three times greater than direct drives. The gates have fewer castings and are shipped fully assembled, ready to weld to chute. Pinions are welded to the shaft for true alignment. The gate opening is 13 x 24 in. It can be pulled out for cleaning. *Wine Railway Appliance Co.*



Packaged Compressors (RA-9)

The single unit T-40 and ER air compressor plants, it is said, are installed and ready to run in a matter of hours. The air-cooled T-40 model has ratings of 25 through 75 hp. Discharge pressures range from 125 to 250 psig. The ER water-cooled 10- and 15-hp models are equipped with water-cooled 5- or 7-in.-stroke ESH single-stage, double-acting compressors. The ESH compressor is used for the 60- to 125-hp ratings. *Ingersoll-Rand.*

Telephone Exchange (RA-10)

A new small-capacity automatic exchange can be operated on ordinary line current. The wall-mounted type 50C can handle up to 10 telephones and up to two simultaneous conversations on separate lines at one time. All calls are dialed directly by the telephone user, eliminating the need for an operator. All working stations can be reached by dialing one digit (1 through 0).

Station No. 1 on the system is equipped with executive right-of-way which enables the user of that phone to dial a busy station and break into the existing conversation. A special grounding key makes this possible. Another feature of the 50C system is automatic time-out which releases a link after 30 seconds, when a phone using that link has been left off its hook.

The wall-mounted system is 13 in. wide, 15 in. high and 5½ in. deep and weighs 37 lb. Its power is supplied by a 48-volt battery eliminator, mounted with the exchange equipment common dust cover, and equipped with a cord for connection to a 120-volt AC line. *U.S. Instrument Corp.*

Tow Tractors (RA-11)

The Clarktor, a gasoline-powered tow tractor, has a turning radius of 108 in., which is 16% less than on previous models. Models 20, 30, 40 and 50 have 2,000, 3,000, 4,000 and 5,000 lb drawbar pull capacities, respectively. Engines are standard four- or six-cylinder Continental Red Seal industrial type with speeds up to 12.8 mph. Transmission is standard or automatic. The CT-50 has four forward speeds; the others, three. Fuel-tank capacity is 17 gallons. *Clark Equipment Co.*

Solid-State Microwave (RA-13)

The type CW-60 microwave system consists of terminal and heterodyne repeater stations capable of handling 300 voice channels or video for short or long-haul communications systems. The new solid-state equipment eliminates all tubes and relays. The CW-6 system has no relays in the alarm system, switchover equipment and baseband order wire. The new solid-state CW-60 equipment will be available for delivery late this year. *Radio Corp. of America.*

Air Compressors (RA-12)

A new line of unit type two-stage compressors from 1 to 20 hp is rated at operating pressures to 250 psi continuous duty. Displacement varies from 5 to 101 cfm. Units from 1 to 10 hp are two-stage two-cylinder compressors and designated VC. Units from 10 to 20 hp are two-stage three-cylinder machines and designated WC.

All compressors in the VC-WC line are air cooled and self-contained. For irregular demand a start-stop pressure switch is supplied. This system shuts off the motor each time pressure falls below a preset limit. For applications where air requirements are relatively steady a constant speed control is supplied. With this system the motor runs continuously, but the compressor unloads at maximum pressure and loads when the pressure falls below the preset limit.

All compressors in the VC-WC line are designed for power take-off, electric motor or gasoline engine drive. Compressors can be supplied mounted on a bedplate with motor and drive or mounted on air receivers with capacities from 60 to 200 gallons. *LeRoi Division, WABCO.*

Market Outlook

Carloadings Rise 0.4% Above Previous Week's

Loadings of revenue freight in the week ended May 18 totaled 601,062 cars, the Association of American Railroads announced on May 23. This was an increase of 2,392 cars, or 0.4%, compared with the previous week; an increase of 14,116 cars, or 2.4%, compared with the corresponding week last year; and an increase of 32,595 cars, or 5.7%, compared with the equivalent 1961 week. Ton-miles generated by carloadings in the week ended May 18 are estimated at approximately 12.8 billion, an increase of 7.4% over the corresponding week of 1962, and 15.4% over 1961.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, May 18

District	1963	1962	1961
Eastern	83,955	83,574	80,938
Allegheny	106,309	94,297	91,628
Pocahontas	57,069	52,081	48,226
Southern	113,836	116,006	112,878
Northwestern	85,253	85,431	76,073
Central Western	114,961	115,539	117,785
Southwestern	39,679	40,018	40,939
Total Western Districts	239,893	240,988	234,797
Total All Roads	601,062	586,946	568,467
Commodities:			
Grain and grain products	50,831	48,604	52,407
Livestock	2,836	3,664	3,792
Coal	111,990	103,972	98,269
Coke	8,773	6,794	6,713
Forest Products	37,058	39,884	37,991
Ore	50,353	50,123	35,622
Merchandise l.c.l.	17,481	23,379	29,220
Miscellaneous	321,740	310,526	304,453
May 18	601,062	586,946	568,467
May 11	598,670	583,947	551,405
May 4	590,981	587,413	543,444
April 27	576,839	577,865	544,379
April 20	561,450	569,493	533,037
Cumulative total, 20 weeks	10,631,590	10,910,266	10,153,392
Estimated revenue ton-miles (millions) 20 weeks	230,300	225,500	202,300

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended May 11 totaled 15,432 cars, compared with 13,858 for the corresponding 1962 week. Loadings for 1963 up to May 11 totaled 280,541 cars, compared with 245,759 for the corresponding period of 1962.

IN CANADA.—Carloadings for the seven-day period ended May 7 totaled 69,602 cars, compared with 94,057 for the previous nine-day period, according to Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
May 7, 1963	69,602	22,968
May 7, 1962	68,985	23,109
Cumulative Totals		
May 7, 1963	1,111,405	410,534
May 7, 1962	1,110,348	435,670

New Equipment

FREIGHT-TRAIN CARS

► *Chicago Great Western.*—Ordered 10 52½-ft, 70-ton-capacity gondola cars from Thrall Car for delivery in July.

► *Rock Island.*—Ordered 500 40-ft, 50-ton box cars from Pullman-Standard at a cost of approximately $4.2 million for delivery beginning in August.

► *Southern Pacific-Cotton Belt.*—Ordered 1,400 Hydra-Cushion box cars, all of nominal 100-ton capacity, to bring total Hydra-Cushion box-car ownership of SP and affiliates to 5,736 units. ACF and Pacific Car & Foundry are building the new equipment, which includes 1,300 60-ft cars, 900 of which will have lading devices and 800 of which will be insulated. The insulated 60-ft cars, for ladings affected by condensation and temperature changes, will have 16-ft door openings with double plug doors and a capacity of 5,537 cubic feet. The uninsulated 60-ft cars, having a capacity of 6,038 cubic feet and 16-ft double doors, are destined for auto-parts and paper service. The remaining 100 cars, of 50-ft length and insulated, have lading devices and extra-heavy floors for tinplate service. Deliveries will be completed by autumn.

New Facilities

► *Cedar Rapids & Iowa City*—Company forces will replace a timber overpass structure near Oakdale, Ia., at an estimated cost of $10,948, and relay 5½ miles of main track between Swisher and Waconia, Iowa, at an estimated cost of $143,000. Both jobs are scheduled for completion by December.

► *Chesapeake & Ohio.*—Ordered a 15-ft TCC machine from Union Switch & Signal division of WABCO for installation at Peru, Ind. The new machine will control about 250 miles of CTC territory between Cheviot, Ohio and Griffith, Ind.

► *Great Northern.*—Ordered signaling equipment totaling $360,000 from General Railway Signal Co. for two type K2 CTC installations. One system will cover 34 miles between Chester and Shelby, Mont., and the other will be for 65 miles between Juanita and Aylmer, N. D. An existing control machine at Havre, Mont. will be expanded to handle the eight field locations of the first installation. An existing control machine at Minot, N.D. will handle the 12 field locations of the 65-mile CTC installation.

► *North American Car.*—Ordered 2.5 million pounds of aluminum plate and extrusions from Reynolds Metals for construction of 300 tank cars of 10,000 to 10,500-gallon capacity. The cars, to be used in lease service, will be built at Texarkana, and the tanks will be fabricated by the J. B. Beaird division, American Machine & Foundry.

► *Northern Pacific.*—Placed a $100,000 order with General Railway Signal Co. for a type K CTC installation covering 11 miles between Huntley and Billings, Mont. The existing control machine at Glendive, Mont. will be expanded to control the five field locations via an existing 226-mile carrier link.

Vaults of radioactive waste are made ready for hoisting aboard a gondola for the trip to the burial grounds.

Hot Cargo: Radioactive Waste

The rail shipment of a 4.9-million-pound-load of concrete vaults containing radioactive waste materials from Long Island to Oak Ridge for disposal was clicked off as easy as geiger-counter work.

While a Long Island diesel-electric was coupling to a string of gondola cars in the early morning darkness of May 20, five men with small plastic-covered film badges clipped to their white coveralls climbed aboard a U.S. Army courier car that served as a caboose.

Battened-down in the 34 Pennsylvania gondola cars was the reason for the special escort, the radiation detection badges, and the weeks of planning —240 ten-ton concrete vaults that made up one of the largest shipments of radioactive waste ever to be moved by rail in this country.

In taking on the job, the railroads once again proved that they can haul anything, anywhere, anytime—even the hottest freight on earth.

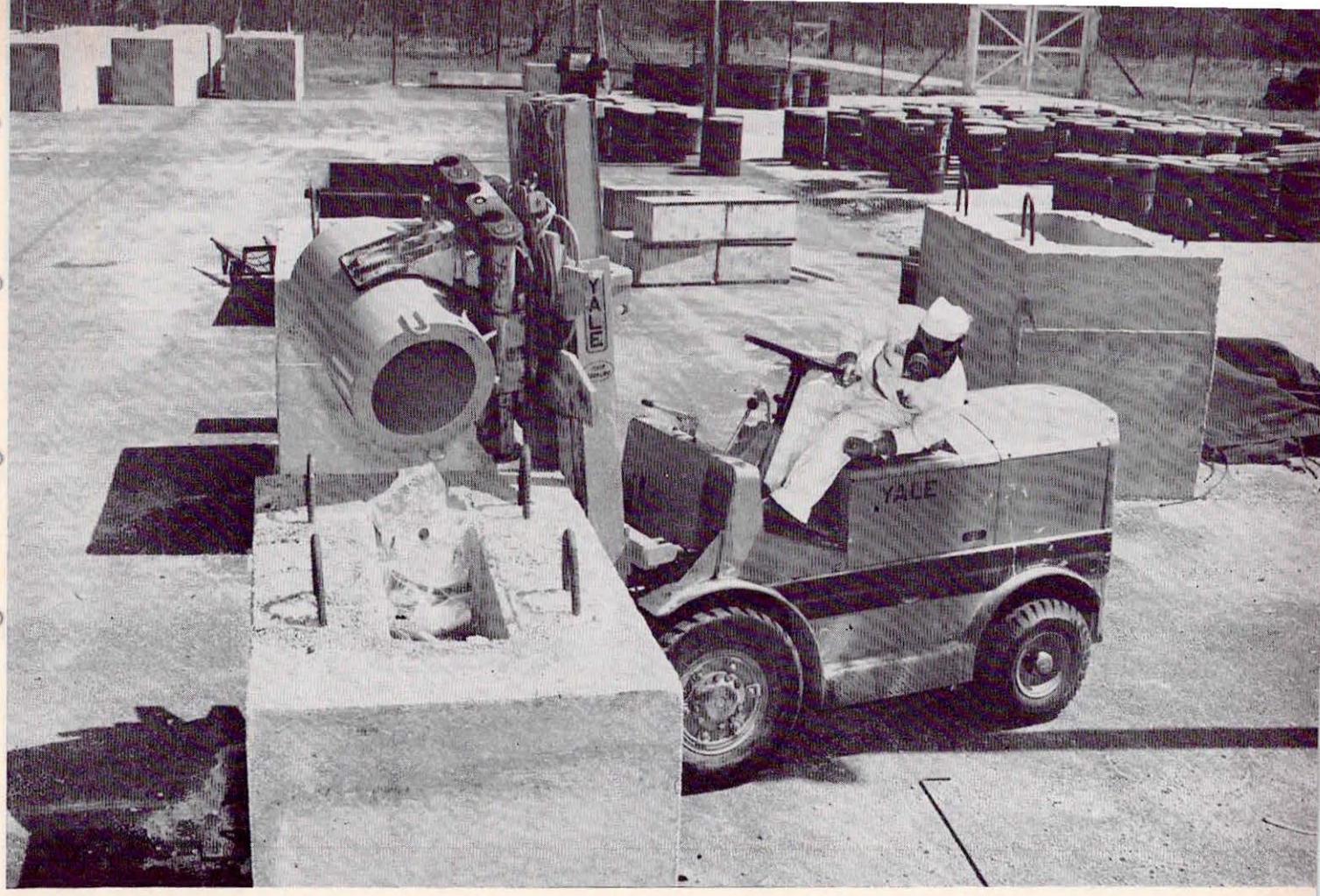
The "hot" material encased in the steel-reinforced concrete tombs represented a three-year accumulation of radioactive waste collected at the Brookhaven National Laboratory at Upton, N.Y., an Atomic Energy Commission nuclear research center operated by nine northeastern universities. Destination: Oak Ridge, Tenn., and burial somewhere in the grounds of that sprawling atomic reservation.

● **First land burial.** The movement from Brookhaven was significant in that it was the first time since the giant laboratory was founded in 1947 that waste radioactive material was shipped out for land burial. Up until 1960, such matter was encased in concrete-filled gasoline drums and vaults and carted out by navy landing craft for dumping in the Atlantic beyond the Continental Shelf, some 200 miles off shore.

Last week's three-day, 800-mile rail trip from the sand and scrub-pine Brookhaven site on Long Island to Oak Ridge was arranged with the detail and precision of a military movement. While non-explosive and relatively harmless in its containment, the radioactive material was handled with the care and respect given all potentially dangerous rail shipments.

The route from Brookhaven was through heavily-populated areas—to Long Island City, across New York harbor by train float, to Greenville, N.J., on to Cincinnati via the Pennsylvania, and then to Oak Ridge over the Louisville & Nashville. The mission of the Health Physics personnel who planned, packed and were piloting the shipment, was to deliver without incident.

● **Heavy-weight containers.** Most of the weight of the 4.9-million-pound-load was made up of the massive con-



Wearing a protective mask and coveralls, an employee dumps radioactive material into a concrete vault.

Gets a Safe Ride to Burial

tainers built especially for the cargo. Included were 44 concrete vaults with walls 17 inches thick, containing cobalt, iron, zinc and many isotopes from the graphite research reactor, and 35 vaults with 12-inch walls with other fission products. Relatively light-weight paper and rags that had become contaminated by radioactivity had to be encased in similar containers with 12-inch walls of concrete and steel.

Slurry from the Laboratory's evaporation plant was mixed with concrete and vermiculite and solidified in the cores of 5′ x 5′ vaults with walls six inches thick. There were no liquids in the entire shipment, to preclude the added problem of containment in the event of an accident.

Because of the shipment's radioactivity level (higher than ICC limitations but considerably within the safety limits of human tolerability, according to Brookhaven scientists) the movement was categorized "exempt." This required that the train be escorted from origin to destination by special personnel.

• **No permits required.** All containers in the gondolas bore the red-stenciled "Radioactive Waste—Keep Away" warning, and Bureau of Explosives placards were attached to the sides of the cars. Although no special permits were required for the move to Oak Ridge, Brookhaven officials notified the New York City Board of Health, Office of Radiation Control, of the move across New York harbor, and also the Bureau of Explosives.

To counteract any possible seepage from rain during the trip, the concrete lids of the vaults were coated with thick asphalt and the floors of the gondolas were lined with heavy plywood treated with automobile undercoating. At Oak Ridge the cars were washed down and inspected with geiger counters to assure decontamination.

• **Diminishing radioactivity.** Highly radioactive material removed from the laboratories is stored in underground storage bunkers at Brookhaven for a "cooling-off" period. Depending on the half-life of the various elements (half the atoms in a given radioisotope will decay within a given time) they are later transferred to concrete vaults.

The 66 men in Brookhaven's Health Physics Division, who are responsible for radiation monitoring and waste disposal and reclamation activities, supervise all rail and truck shipments of atomic materials. About once a month they prepare for shipment to Idaho Falls, Ida., by special railroad flat car, casks of spent uranium fuel elements for reprocessing for future use (RA, Aug. 14, 1961, p. 29).

Unlike conventional industrial plants and laboratories where wastes are burned or dumped without difficulty, nuclear facilities such as Brookhaven face the continuing problem of radioactive waste disposal, officials point out. While some waste can be moved by truck, the weight and bulk of the shipments, necessitated by the protective containers, almost demand movement by rail. As more power utilities and industrial firms convert to nuclear energy sources, the railroads are expected to be called upon more often to aid in the disposal process.

Twin Industry Needs: 'Unity—Self-Help'

Regulatory-legislative clouds are starting to break up. But, top transportation men agree, new gains depend on the industry standing together and doing its best with what it has.

Slowly, the regulatory-legislative climate for railroads is improving. But a pressing need still exists for greater railroad unity, greater railroad initiative toward self-help.

Chicago & North Western Chairman Ben W. Heineman stressed unity; both he and U. S. Freight President Morris Forgash emphasized the self-help angle, at a recent Railroad Transportation Institute meeting in Chicago.

Mr. Heineman's warning was blunt: "A divided industry will not be able to obtain remedial legislation," and the wealthier carriers will be making a mistake if they fail to recognize the basic economic erosion of the industry's competitive position.

● **'Nationalization's shadow.'** Mr. Forgash, warning that "we are standing in the shadow of nationalization" called for a revitalization of the nation's transportation system—and he urged rail management to "re-read the Transportation Act of 1958 and the admonition of Congress to recognize changing conditions, to compete more aggressively for business and to engage in self-help through mergers, coordination, modernization of freight rates and elimination of duplicate services."

Both men agreed that the relatively well-off position of some roads doesn't necessarily reflect a basic prosperity in railroading—mainly because of the support received by a number of companies through income from non-railway operations. Both also agreed that the industry has been losing ground in its competitive position each year for a decade.

● **Marginal roads hit.** The decline, said Mr. Heineman, has been felt by marginal railroads first. Companies in a middle category have felt it, "but not as hard, and the wealthy railroads have felt it least." The consequence, he said, is that "railroads who by their position should be the leaders in the difficult field of molding public opinion . . . in the political vineyard, have not." Some carriers, he said, have felt geographically insulated, protected, and have not felt it necessary to participate in making the changes" which the industry must have for survival. One example: A traffic department will be unwilling to reduce a rate on a commodity, "and by the time they are willing to recognize the facts, the base of traffic has eroded 30-40%."

There is no alternative to price reduction for competitive purposes, Mr. Heineman said, and "people who talk about rate wars and cut-throat competition" either have been raised in a protected, non-competitive atmosphere or are afraid of the competition of railroads. There is only one place from which greater revenues can come, he said, "from using the inherent advantages."

● **No bulwark.** "There have been many occasions in the past when public sentiment was the thin shield that averted public ownership," said Mr. Forgash. "I am afraid that public sentiment would not be much of a bulwark today." The alternative to nationalization, he said, is to "find a way to revitalize the transportation system."

Many advances made

The RTI audience also heard some optimistic talk about the future: "Dramatic developments have taken place in the pricing of services, in the production and use of new and more efficient equipment and in the employment of new technologies." The brightest hope of all: containerization, which, said Mr. Forgash, "already has brought about a revolution in transportation, which, if wisely managed, can become the transportation renaissance of the twentieth century." Piggybacking, he said, can provide the key to the coordinated transportation that modern industry demands. But he warned that "a curious idea has gained some headway that coordination can be brought about by substituting the services of one carrier for the services of another. Substitution not only fails to bring about coordination—it defeats the very purpose of piggybacking."

● **Merger picture brighter.** Another bit of optimism concerned the rail merger situation—because new criteria for mergers, based on a recognition of the need to eliminate wasteful operations, are emerging in the ICC and in the courts.

P. F. Osborn, vice president and general counsel of the Atlantic Coast Line, told an RTI audience of a "change in concept and the establishment of a trend" since World War II. "No longer do standards in vogue 50 years ago apply now—the Commission recognizes this," said Mr. Osborne. He cited a chronology of merger cases in which the consolidated roads have eliminated more and more points of competition, and he noted that the proposed ACL-Seaboard Air Line merger encompasses more competitive points than are involved in any other proposal. "We will have more elimination of competition in railroading than we have in the past," he said, because "duplicate facilities have to be reduced. . . . We have wasteful transportation running out our ears."

Regional railroad competition and the disposition of smaller roads are primary concerns in current merger proposals, according to Mr. Osborne. Precedents indicate several roads will compete in a region, he said, and this is an "automatic process."

● **Fast progress needed.** "We must recognize that railroads have been completely unable to keep pace with the economic growth," he concluded. "It is essential we do everything in our power to see we have efficient systems. One of the best ways this can be done is to see that mergers are progressed rapidly."

In the area of inter-modal competition, an RTI panel saw some progress coming, perhaps, in establishment of user charges—even though the proposed charges were termed inadequate to meet public costs. Despite the comparatively small amount of revenue the charges would produce, however, the panel agreed that they would give railroads some opportunity to establish themselves more strongly as the low-cost carrier.

Barges say they are the most economical mode, said Col. Doswell Gullatt, transportation consultant, but they also say that a "token user charge of two cents [per gallon of fuel] would put them out of business." Col. Gullatt called the principle of a user charge "fair and equitable." At the same time, the present fuel tax for motor vehicles is inequitable, said H. C. Kroll, statistical bureau manager of the Western Railroad Traffic Association executive committee, because it "places an undue burden on the car user. . . . It doesn't provide for the ton-mile."

● **All expenses.** Public costs for waterways, Col. Gullatt said, should

include all government expenses to the movement of cargo from dockside to dockside — taxes foregone, reduced interest on loans, operation and maintenance costs, bridge construction and navigational aids. He admitted that it is difficult to establish these as public costs but "nevertheless, they are a real financial advantage." Inclusion of public costs, he said, could increase rates as much as 48%.

Cost finding is still in a form of evolution, according to David Wells, assistant general attorney of the ACL and third member of the panel. Mr. Wells said Barge Form C lacks a schedule for public costs, without which it is "a one-legged animal." "The ICC would elevate Barge Form C to the status of an angel," he said, "when it is no more than an anthropoid ape on the evolutionary scale of cost finding." The ICC, he added, has built into Form C a flexibility which other models do not have.

Motor-carrier regulation also came under fire—because "another dual standard of regulation has emerged," Carl Helmetag Jr., assistant general counsel of the Pennsylvania, told the Transportation Institute. "For the motor carriers using owner-operators, cost evidence to show that their price reductions will be compensatory is, for all practical purposes, no longer required. But the Commission has nowhere indicated that it has similarly relaxed the rule of law applicable to railroad pricing reductions."

● **ICC reversal.** In 1951, Mr. Helmetag said, the Commission required owner-operator leases to be of 30 days duration and that compensation for the owner-operator not be based on a split of the revenues. These rules, he added, were upheld by the Supreme Court. If the Commission had stuck to its guns, he said, a problem would not have arisen. But the Commission reversed itself, and "for reasons of expediency alone, refused to put into effect a rule that would have ended the practice" of splitting revenues. The ICC also decided to refer only to the division of revenues between carrier and owner-operator to determine if a rate is compensatory, he said. He noted that "the use of owner-operators . . . is most prevalent with respect to the motor carrier traffic for which the railroads are in intense competition." Mr. Helmetag added that the issue will be taken to court, although no details of the railroads' case have been worked out.

EMD Chief Sees Bright Space-Age Rail Future

R. L. Terrell, telling New York about GM's new diesels, cites increased population, production growth, more government support, and public understanding, as factors favoring the carriers.

"Transportation, in the public mind, is fast becoming oriented to space travel and the far flung planets of the universe. Exciting as all this is, let's not forget the importance of the flanged wheel on the steel rail and the tremendous advantage the railroads have in the application of this principle in furthering the transportation needs of the world." Speaking these optimistic words on the outlook for railroads was R. L. Terrell, head of the Electro-Motive Division of General Motors, in telling railroad executives and the press of EMD's new GP-35 and DD-35 locomotives at a New York luncheon on May 21.

Along with this important inherent railroad advantage, Mr. Terrell stressed several factors that indicate a bright future for the transportation industry:

- A population boost of more than 20 million people by 1970.
- A return to the 4% annual increase in Gross National Product in the next ten years, the same increase that prevailed between 1947-1955 and then dropped to an average 2.2% in succeeding years.
- Improved public understanding of railroad problems.
- Growing government support.

Developments within the railroad industry have been spectacular, he said, citing new specialized car designs, and the piggyback trend. Piggyback carloadings jumped from 168,150 in 1955 to 706,441 in 1962, with an average yearly increase of 38.7% since 1958. For the first 16 weeks of 1963 the carloadings ran 14.5% ahead of 1962.

Mr. Terrell noted the trend toward higher train speeds and tonnages and the greater carrying capacity of new cars. AAR figures, he said, show 6,794 new freight cars placed in service in first quarter 1963 to have an average carrying capacity of 66.56 tons, compared with average capacity of 51.1 tons for about 16,000 cars retired in the same period.

He observed that although carloadings were only about 2% greater in 1962 than in 1932, the number of ton-miles generated by the average carloading increased to 20,600 in 1962, from 8,300 in 1932.

New fast service

The swing to high-speed service (50 miles per hour and over) shows up in a recent survey, he said, that listed 140 trains on 40 different railroads in the United States and Canada as posting an aggregate daily mileage of 18,263. He mentioned the Burlington, which now has 40% of its mainline freight on a high-speed preferred basis, compared with 30% in 1956.

These favorable economic and political factors, along with the railroads' aggressive programs, make Electro-Motive "even more optimistic than in October, 1961 when the GP-30 was introduced."

"We now have GP-30's going into their second year of operation on three railroads which received first production units of this model in April, 1962. They are among the more than 900 GP-30 locomotives we will have delivered to U.S. railroads by October of this year.

"These early GP-30's are in service on a heavy-hauling eastern railroad, a midwestern high-speed carrier, and a mountainous western road. Two of these railroads report maintenance costs of less than six cents a mile and the third reports maintenance costs of less than five cents a mile.

"Meanwhile, locomotive utilization has practically doubled on these railroads compared with the monthly mileages of the older diesel locomotives they replaced. Where the older units were running eight or nine thousand miles a month, the GP-30's are running 16,000 miles and more."

Highlights of EMD's two new locomotives, the 2,500-horsepower GP-35 and the 5,000-horsepower DD-35 booster unit (RA, May 20, 1963, p. 42) were described by Victor E. Rennix, general sales manager, Electro-Motive Division.

YOU OUGHT TO KNOW

Reversing its Division II, the ICC in No. 33664 has cleared tariff rules which extend promiscuous loading arrangements to carload shippers. The arrangements, used principally by forwarders, permit a carload shipment to be loaded into more than one car, provided the shipment meets minimum-weight requirements for a single car. Railroads themselves go in for promiscuous loading to reduce platform labor costs at stations where they hold themselves out to load carload freight. The principal purpose of extending the arrangement to shippers was to obtain further relief from losses on those operations.

George M. Harrison, 72, grand president, Brotherhood of Railway Clerks since 1928, was elected to the newly created post of chief executive at the organization's 22nd regular convention in Los Angeles May 17. C. L. Dennis, 54, vice grand president, Chicago, was elected grand president to succeed Mr. Harrison.

Transportation Man of the Year in Wisconsin is Richard H. Heilman, director of transportation for the A. O. Smith Corp. He was named 1963 recipient of the honor by the Wisconsin Chapter of the Association of Interstate Commerce Commission Practitioners.

A "highly satisfactory" year is shaping up for the Southern, the road's president, D. W. Brosnan, told stockholders at Richmond, Va., last week. He mentioned the coordinated highway-railroad service, called COMAR—in which Southern is associated with four common-carrier truckers in the South and three in the East—as an example of "the customer-oriented approaches we are using to make people realize how great a resource they have in rail transportation when they need speed, dependability and low cost in moving their freight."

Reduction of loss and damage to brick and tile through new methods of packaging, handling, or loading is the subject of a survey being conducted by the National Freight Loss and Damage Prevention Committee. The committee reports that one road is building flat cars equipped with cushion underframes for brick movement. Palletization is also found to be effective.

Opposition to the proposed Union Pacific-Rock Island merger was announced by Chicago & North Western Chairman Ben W. Heineman May 21 at the C&NW annual meeting at Chicago. Said Mr. Heineman: "We intend to oppose it vigorously and I don't think we'll be alone." Mr. Heineman also said C&NW is considering setting up a holding company and diversifying its operations.

A flexible rate structure oriented to economic cost and reasonable profit is "the most immediate need of our transportation economy," REA Express President William B. Johnson told a Kansas City, Mo., audience. "So long as we shy away from the all-commodity rate, the container or cube rate, the space-available rate, the aggregate-volume small shipment rate, the trainload rate, and the contract rate," he declared, "we shall continue to distort consumer choices uneconomically, to foster private carriage, and to strangle common carriage."

An equipment leasing operation has been set up by Strick Trailers, a division of the Fruehauf Corp. Strick President Sol Katz said the new RENTCO Division will "help serve the needs of the transportation industry in making rail cars, containers, bogies, and trailers available to both shippers and carriers on a short-term, low-cost rental basis." He said equipment valued at $2.5 million is now out on lease.

The possible benefits of integral trains are being studied by 35 railroads, Clair M. Roddewig, president of the Association of Western Railways, told the Chicago Coal Shippers Club recently. "While the initial study was being directed to coal destined to major bulk consumers," he said, "the railroads cooperating in the study said the basic principle could apply to other bulk commodities, such as ore, stone, grain and crude oil." Mr. Roddewig said that railroads seem to be overcoming some of their regulatory obstacles and "now appear to be moving in the direction of supplying more and more of the transportation needs of the coal industry through innovations that will be of mutual benefit to both industries."

Calling for a revolution in transportation and distribution to make transportation a dynamic industry, Edward W. Wilson, president of Armour & Co., urges management "to stop thinking primarily about problems, about what is wrong with transportation, and to think more about how to handle distribution better, faster, differently—more economically, more efficiently." Mr. Wilson spoke at a Chicago Traffic Club meeting marking National Transportation Week.

The role of the accountant in the pricing of railroad services is assuming more importance daily, John M. Budd, president of the Great Northern, said last week. Mr. Budd—addressing the Diamond Anniversary annual meeting of the AAR's Accounting Division in Atlanta, Ga.—pointed out that various segments of the accountant's job are much more complex than they were in the past. "For one thing," he said, "before most major and many minor policy decisions are made there must be an estimate of what effect present tax laws will have on the proposal, or what effect the proposal will have on taxes. There are countless other matters which have an important bearing on any contemplated changes. Sound judgment of accountants in appraising the effect upon our operations is of the utmost importance and of invaluable aid in the successful conduct of our business."

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USE SPACE IN THIS SECTION FOR RESULTS

Shipper Statesmanship

Shippers who will approach transportation problems from national interest standpoint are likely to come up with the right answers.

A cross-section of leading shippers elsewhere in this issue give their opinions, pro and con (mostly pro), on our idea that national policy toward transportation should be largely the product of shippers' leadership. A majority of the shippers who replied to our questions favor President Kennedy's transportation program—which is supported by the railroads. A minority are opposed to parts of the program—especially the degree of rate freedom President Kennedy seeks for all carriers—on bulk and agricultural commodities. The reason for opposition, where it exists, appears to arise usually because the shipper in question doubts that greater rate-making freedom for railroads will be of any direct benefit to him; and might result in some disadvantage.

This country will, of course, never have a transportation policy that will protect the national interest in healthy railroads, and other agencies, if each shipper supports only those specific clauses in a policy statement which serve (or, at least do not threaten) his immediate self-interest. This viewpoint is well expressed by Dwight L. Koerber, executive secretary of the Coal Traffic Bureau at Pittsburgh. He writes:

"I do not believe a person should promote or oppose legislation merely because he's a shipper. He should do this as a citizen. However, his position as a citizen in possession of special knowledge —and also as one who represents an important segment of the public interest—carries with it, I believe, a non-delegable duty to communicate directly with his employer and his congressman on major transportation issues.

"In arriving at a position on a particular piece of legislation, I feel he should first examine its general purpose. If he is in accord with that purpose, he should so state—even though he may raise bona fide questions about some of the measure's provisions. Too often, it seems, we get so wrapped up in and confused about technical interpretations, that we mistakenly conclude that we aren't competent to speak about the very condition we know about, which the bill is designed to meet."

Exactly. National transportation policy should be designed to protect the public interest in the availability of adequate and economical transportation. This certainly includes extending an opportunity to necessary transportation modes to compete for traffic and to earn a decent return.

So far, national transportation policy, as expressed in the Interstate Commerce Act, is largely an exercise of the government's powers as a policeman. But government has gone into the transportation business itself in a big way—highways, waterways, air transport facilities—and has become, for its favored agencies, more of a promoter than a disciplinarian. As far as railroads are concerned, government is over-strict on the discipline side, and is very little else. It chastises but does not nourish. Other carriers, it nourishes but seldom chastens.

Shippers of wide experience and a national outlook (rather than one that is merely parochial or narrowly selfish) are the people to whom the nation must look for dominant leadership in the formulation of effective transportation policy. Few other persons have the qualification of practical experience to guide them—while, at the time, being free of suspicion of possible bias in favor of one agency over the other. The alternative to large reliance on shippers for guidance is a crazy-quilt policy, reflecting conflicting self-interests which cannot be effectively reconciled. Failing experienced and impartial leadership, policy may be imposed by political leaders who, however well-intentioned, cannot bring first-hand understanding to the task.

Shipper-Statesmen Have What It Takes

There are plenty of shippers of the caliber and attitude of mind that is needed. Our only uneasiness about them arises from the feeling that they may be less assertive than they should be.

Some shippers, for example, have their doubts about the Mass Transit Bill. The justification for this measure, in this paper's opinion, is one of practical urgency rather than firm principle. It arises from the heavy subsidies which government has extended to urban transport by highway and which it shows no disposition to remove. In such a situation, if some cities are to have rail transit at all, they can do so only if some of the favors extended to highway transport are also extended—at least to some slight degree—to rail transit.

This is a tough problem, but we believe public spirited and experienced shippers are capable of analyzing the situation accurately and in coming up with the right answer.

If anybody in the country is qualified to steer a transportation policy course that will be consistent with the national interest in a healthy transportation system, then shippers with a viewpoint of statesmanship (rather than immediate self-interest) meet the prescription. The more outspoken they are in the leadership they display in supporting sound policies, the better it will be for all concerned.

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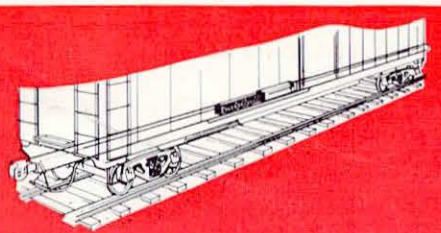

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